HCD-ED2

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

HCD-ED2 is the tuner, deck, CD and amplifier section in CMT-ED2.

This system is equipped with the Dolby* B-type noise reduction system.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

CD SECTION	Model Name Using Similar Mechanism	NEW
	Mechanism Type	CDM-61
	Base Unit Type	KSM-331AAN/K1NP
	Optical Pick-up Type	KSS-331A (RP)
TAPE DECK SECTION	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CMAL1Z025A

SPECIFICATIONS

Amplifier section

For the U.S. model

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm loads both channels driven, from 90 - 15,000 Hz; rated 15 watts per channel minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

North American model:

Continuous RMS power output (reference):
17 + 17 W
(8 ohms at 1 kHz, 10% THD)

European model:

DIN power output (rated): 15 + 15 W
(8 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
17 + 17 W
(8 ohms at 1 kHz, 10% THD)

Music power output (reference):
35 + 35 W

Other models:

The following measured at 230 V AC, 60 Hz

DIN power output (rated): 15 + 15 W
(8 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
17 + 17 W
(8 ohms at 1 kHz, 10% THD)

Inputs

MD IN (phono jacks): Sensitivity 1,000 mV, impedance 47 kilohms

Outputs

MD OUT (phono jacks): Sensitivity 500 mV, impedance 1 kilohm

CD DIGITAL OUT OPTICAL:
Optical

PHONES (stereo phone jack):
Accepts headphones with an impedance of 8 ohms or more

SPEAKER: Accepts Impedance of 8 to 16 ohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	MAX 44.6 μW* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 - 790 nm
Frequency response	2 Hz - 20 kHz (±0.5 dB)

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	50 - 13,000 Hz (±3 dB), using a Sony TYPE I cassette 50 - 14,000 Hz (±3 dB), using a Sony TYPE II cassette
Wow and flutter	±0.15% W. Peak (IEC) 0.1% W. RMS (NAB) ±0.2% W. Peak (DIN)

— Continued on next page —

COMPACT DISC DECK RECEIVER

MICROFILM

SONY®

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
North American model:	87.5 - 108.0 MHz (100-kHz step)
Other models:	87.5 - 108.0 MHz (50-kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
North American model:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,710 kHz (with the tuning interval set at 9 kHz)
European model:	531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM bar antenna, external antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
North American model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
Other models:	110 - 120 V or 220 - 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	55 W
Dimensions (w/h/d)	Approx. 130 × 212 × 240 mm ($5 \times 8\ ^1/_2 \times 9\ ^1/_2$ in) incl. projecting parts and controls
Mass	Approx. 4 kg (8 lb 13 oz)

Design and specifications are subject to change without notice.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET UND SICHEREITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : OSYNLING LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYAZAT! : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

This caution label is located inside the unit.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

To change the AM tuning interval (not applicable on the European model)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz on North American model). To switch the AM tuning interval, tune in any AM station first, then turn off the system. Pressing TUNE + on the unit down, turn the system back on. When you change the interval, all the AM preset stations are erased. To change back to the original interval, repeat the same procedure.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

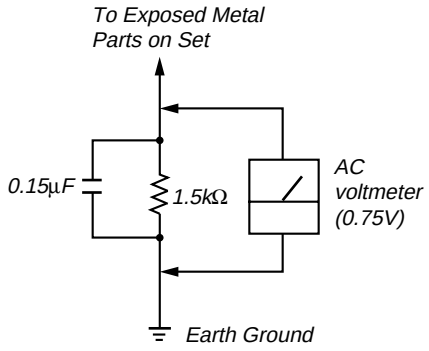

Fig. A. Using an AC voltmeter to check AC leakage.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveform is output several times.

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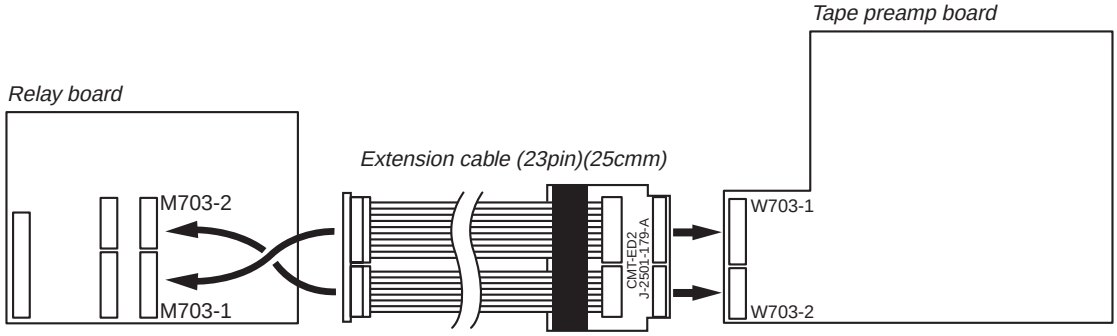
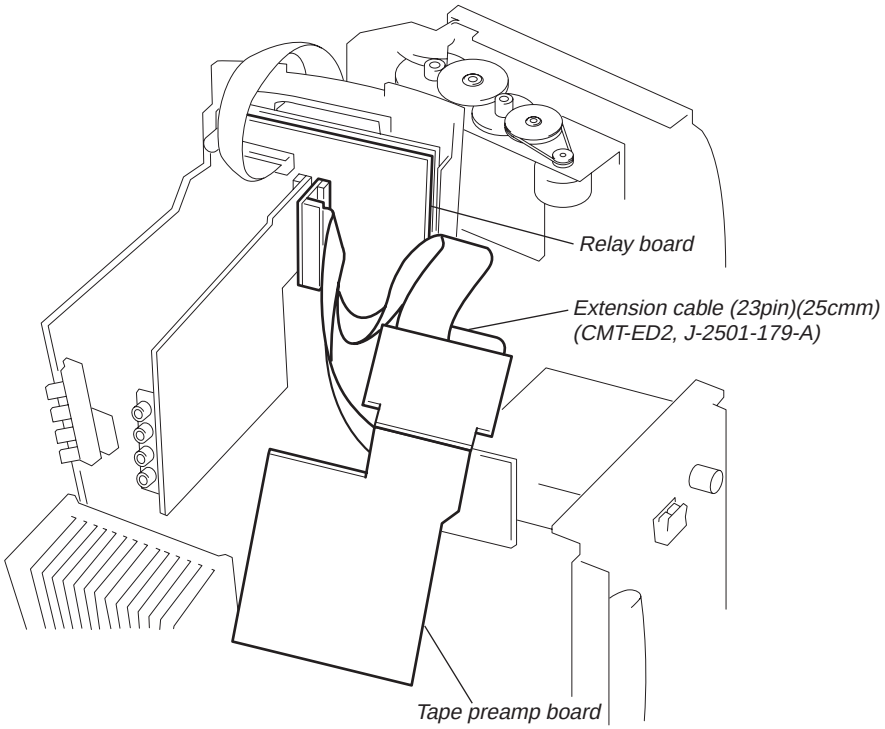
SECTION 1
SERVICING NOTE

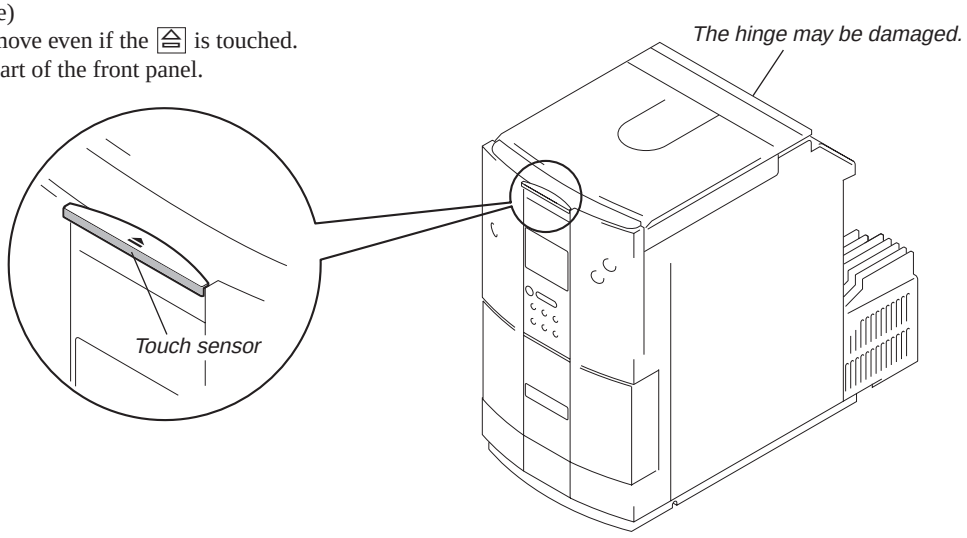
Connectiong the extension cable (CMT-ED2)





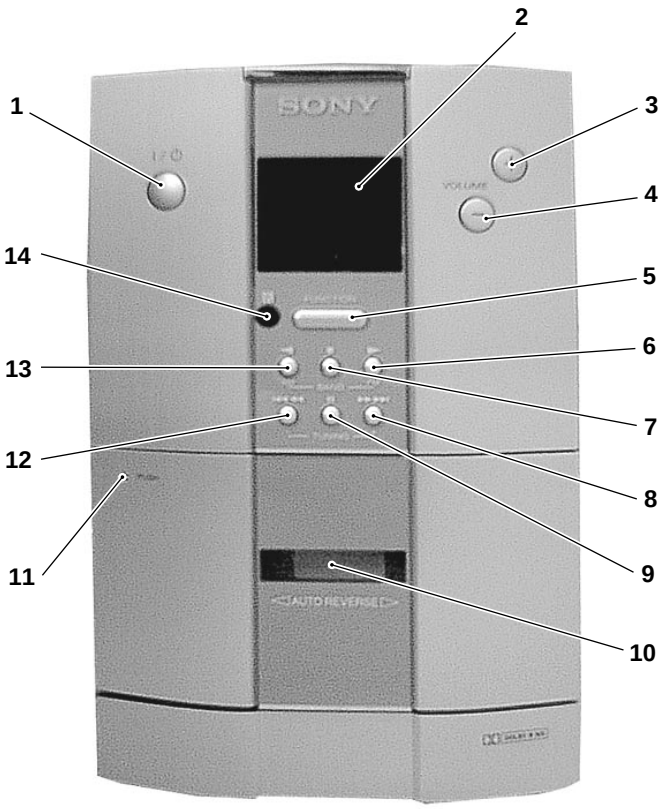
CD LID

The CD lid of this unit is opened and closed electrically.
Opening or closing the CD lid with force when the power plug is not connected to the outlet or the power is OFF may damage the hinge.
When servicing the unit, open and close the lid by touch the ⏏ button. (metal side)
The lid does not move even if the ⏏ is touched.
Touch the metal part of the front panel.



SECTION 2
GENERAL

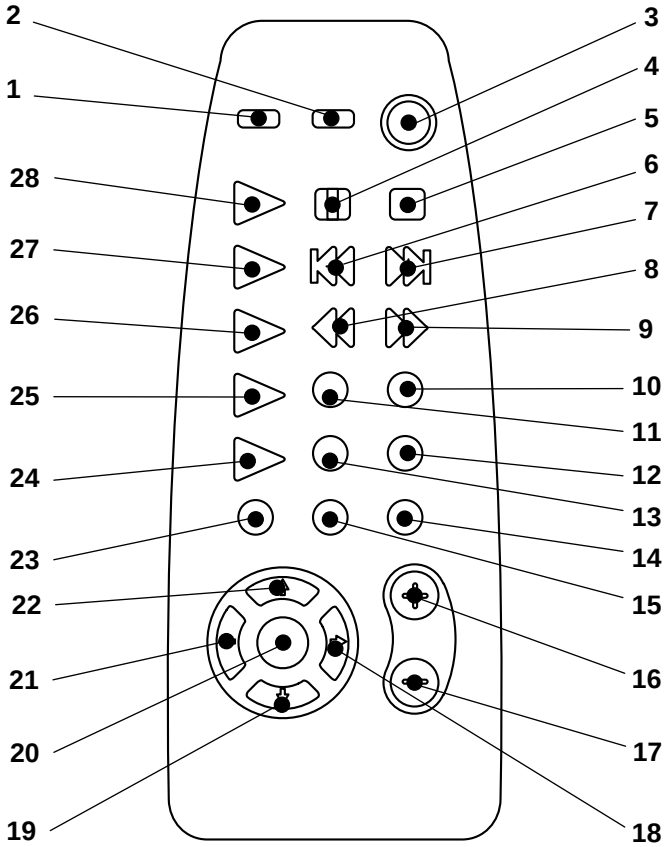
Front Panel



LOCATION OF PARTS AND CONTROLS

1 I/⏻ (Power) switch
2 Display window
3 VOLUME + button
4 VOLUME - button
5 FUNCTION
6 ► button
7 ■ (stop) button
8 ►► ►►I + button
9 ❚❚ button
10 DECK Lid
11 ⏏ Push
12 I◄◄ ◄◄ - button
13 ◄ button
14 Remote sensor

REMOTE



1 OPEN/CLOSE button
2 DISPLAY button
3 I/⏻ (power) switch
4 ❚❚ (pause) button
5 □ (stop) button
6 I◄◄ (AMS*) TUNING - button
7 ►►I (AMS*) TUNING + button
8 ◄◄ button
9 ►► button
10 ● REC button
11 DOLBY NR button
12 SURROUND button
13 TUNING MODE button
14 DSG button
15 STEREO/MONO button
16 VOLUME + button
17 VOLUME - button
18 TIMER SELECT button
19 SLEEP button
20 ENTER button
21 TIMER SET button
22 MEMORY button
23 CD REPEAT button
24 PLAY MODE button
25 DIR MODE button
26 TAPE ◄► button
27 TUNER/BAND button
28 CD ► button

* AMS is the abbreviation for Automatic Music Sensor.

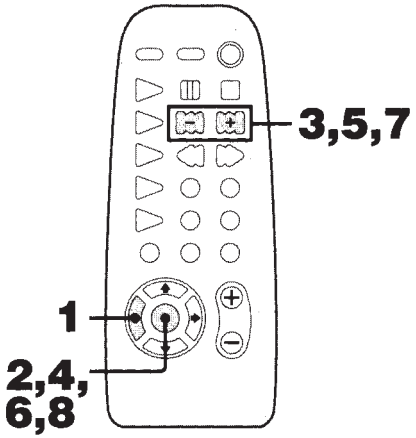
This section is extracted from instruction manual.

Step 2: Setting the time

Before you can use the system's timer functions, set the internal clock.

The clock uses a 24-hour system on the European model, and a 12-hour system on other models.

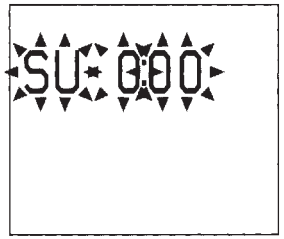
The 24-hour system is used here for illustration purposes.



1 Press TIMER SET.

The clock on the display begins to flash.

When "DAILY" or "⏲ REC" appears, press ⏮/⏭ repeatedly until it disappears.



2 Press ENTER.

The day of the week indication flashes.

3 Press ⏮/⏭ repeatedly to set the day of the week.

4 Press ENTER.

The hour indication flashes.

5 Press ⏮/⏭ repeatedly to set the hour.

6 Press ENTER.

The minute indication flashes.

7 Press ⏮/⏭ repeatedly to set the minute.

8 Press ENTER.

The clock will begin operating.

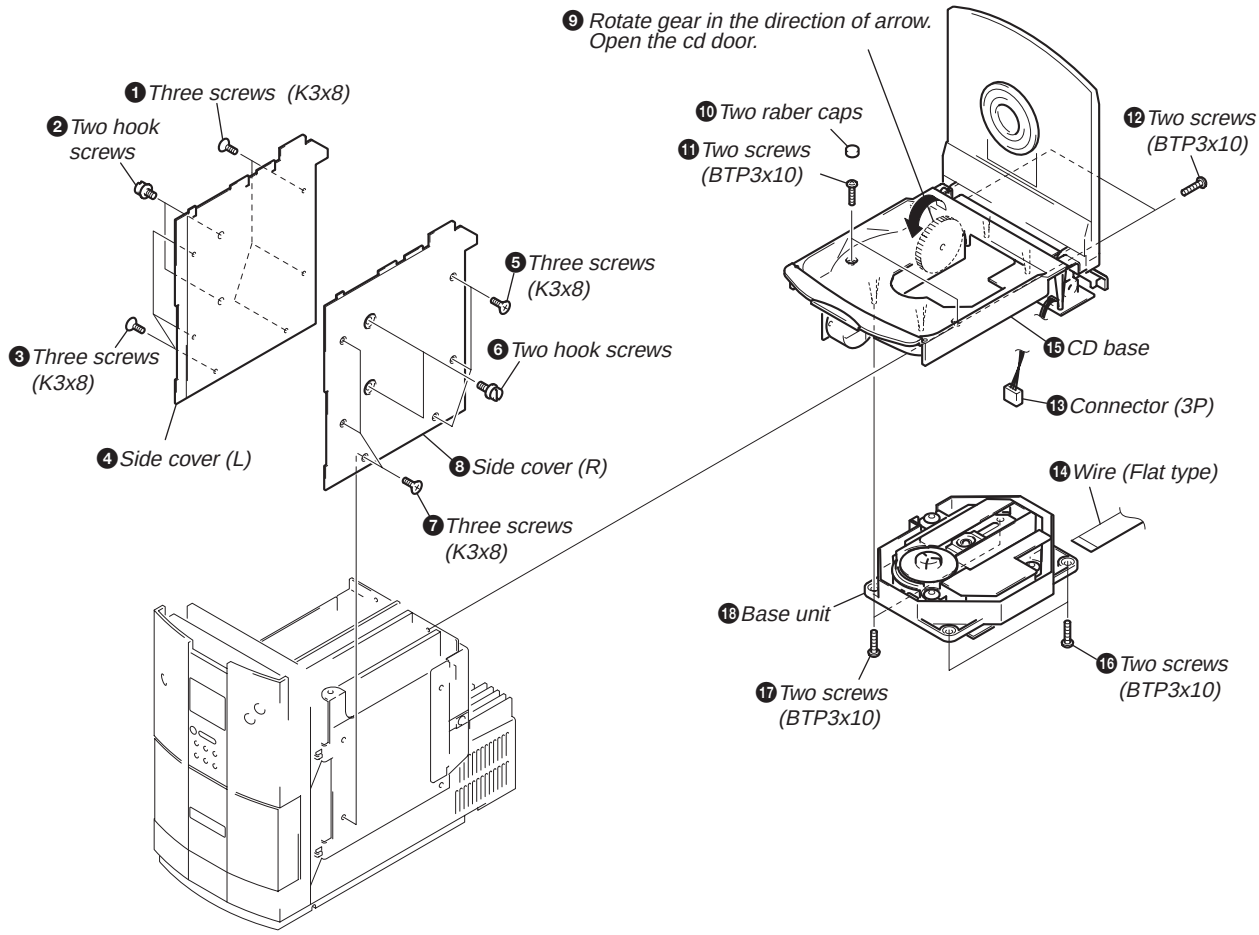
Tip

If you make a mistake, start over from step 1.

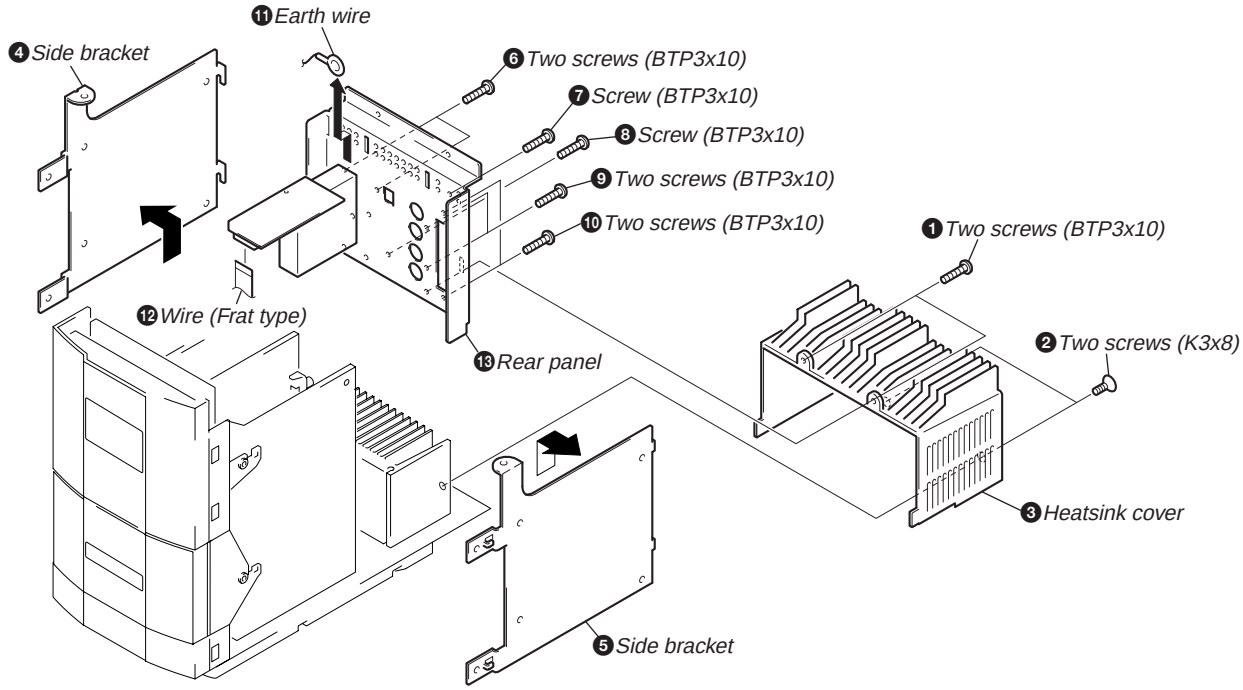
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

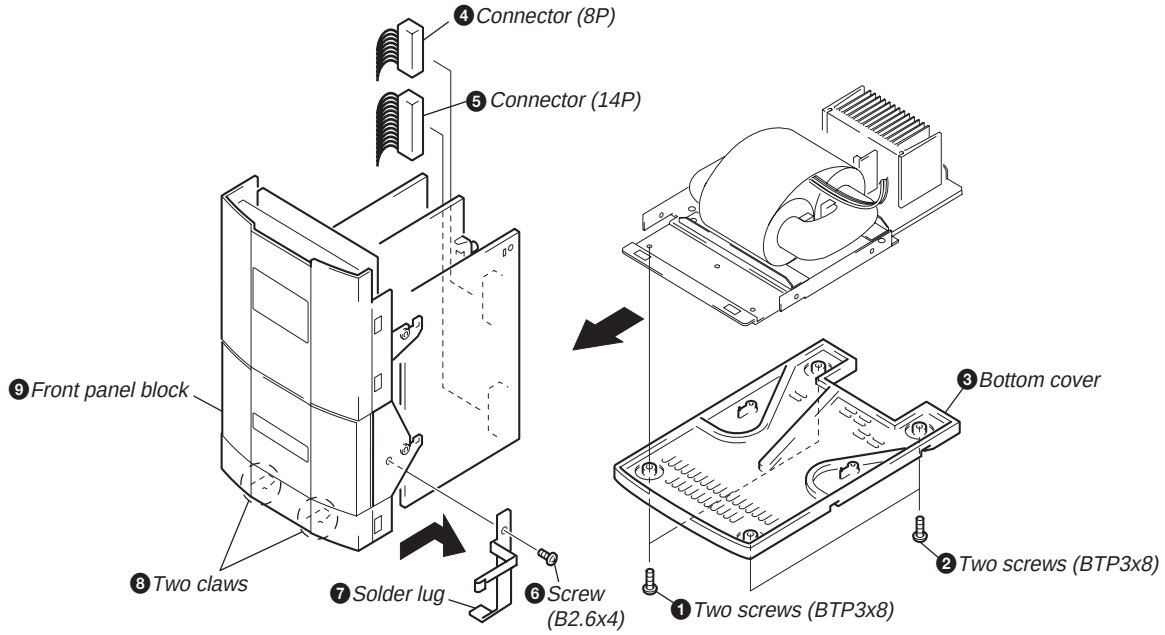
3-1. CD BASE AND BASE UNIT


❶ Three screws (K3x8)
❷ Two hook screws
❸ Three screws (K3x8)
❹ Side cover (L)
❺ Three screws (K3x8)
❻ Two hook screws
❼ Three screws (K3x8)
❽ Side cover (R)
❾ Rotate gear in the direction of arrow. Open the cd door.
❿ Two raber caps
⓫ Two screws (BTP3x10)
⓬ Two screws (BTP3x10)
⓭ Connector (3P)
⓮ Wire (Flat type)
⓯ CD base
⓰ Two screws (BTP3x10)
⓱ Two screws (BTP3x10)
⓲ Base unit

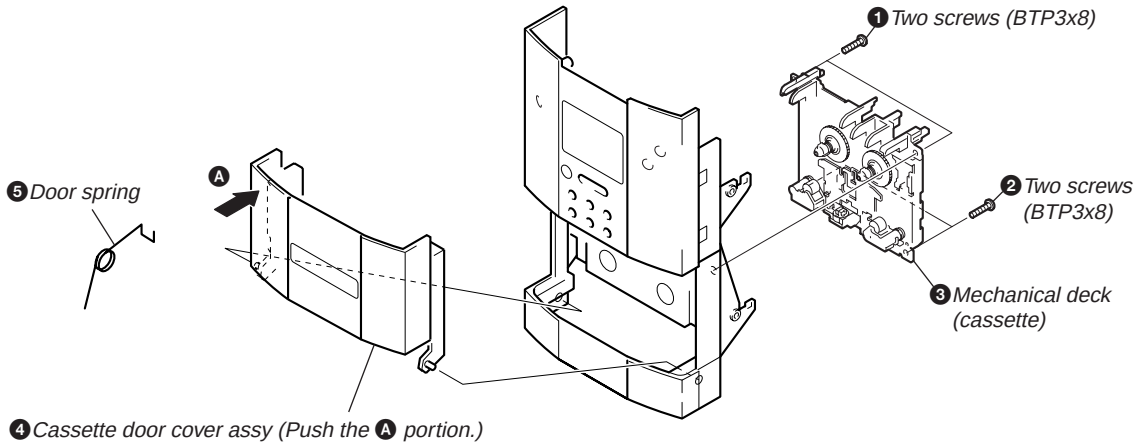
3-2. REAR PANEL



3-3. BOTTOM COVER AND FRONT PANEL



3-4. DOOR COVER AND MECHANICAL (CASSETTE)


❶ Two screws (BTP3x8)
❺ Door spring
Ⓐ
❷ Two screws (BTP3x8)
❸ Mechanical deck (cassette)
❹ Cassette door cover assy (Push the Ⓐ portion.)

SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	28 to 71g • cm (0.39 – 0.99 oz • inch)
FWD back tension	CQ-102C	1 to 7g • cm (0.01 – 0.10 oz • inch)
REV	CQ-102RC	28 to 71g • cm (0.39 – 0.99 oz • inch)
REV back tension	CQ-102RC	1 to 7g • cm (0.01 – 0.10 oz • inch)
FF/REW	CQ-201B	56 to 122g • cm (0.78 – 1.69 oz • inch)
FWD tension	CQ-403A	100g or more (3.53 oz or more)
REV tension	CQ-403R	100g or more (3.53 oz or more)

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION | **0 dB=0.775V**

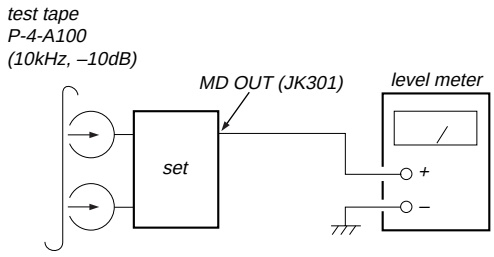
1. Demagnetize the record/playback head with a head damagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-ch.
7. Switches and controls should be set as follows unless otherwise specified.

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

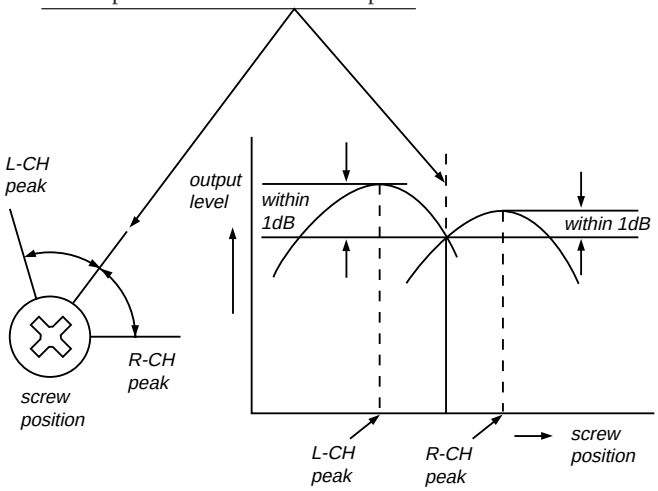
Record/Playback Head Azimuth Adjustment

Procedure :

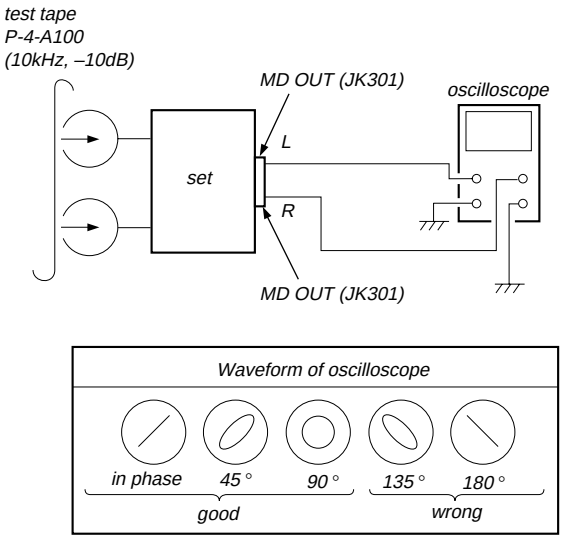
1. Mode : Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.

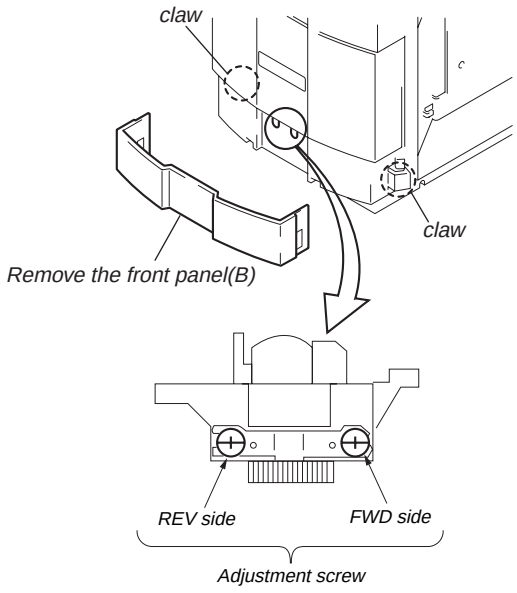


3. Mode : Playback



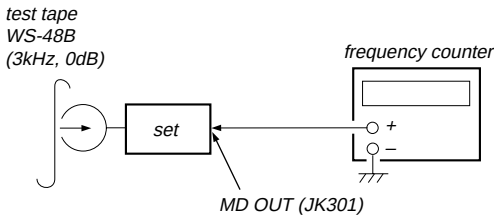
4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location :



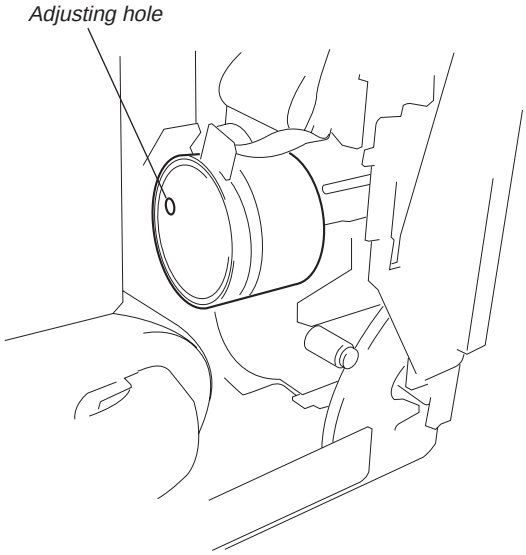
Tape Speed Adjustment

Procedure :
Mode : Playback



1. Insert the WS-48B into the deck, and playback.
2. Adjust the Control at the bottom hole of the motor (M901) so that the frequency counter reading becomes 3000 ± 90 Hz.

Adjustment Location : MOTOR (M901)

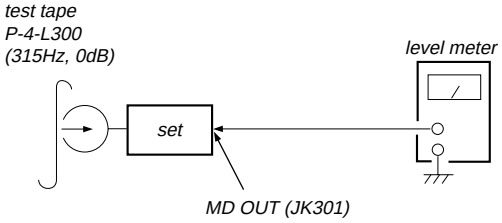


Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment

Procedure :
Mode : Playback



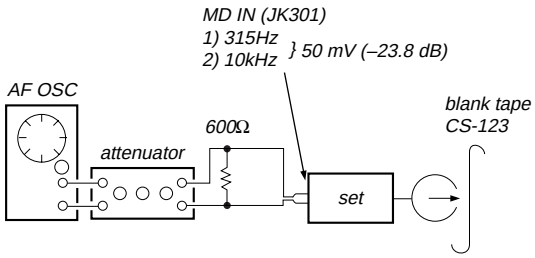
Deck is VR703 (L-CH) and VR704 (R-CH)
so that adjustment within the following adjustment level.

Adjustment level :
Playback level: 301.5 to 338.3 mV (–8.2 to –7.2 dB) level difference between the channels: within ±0.5 dB
Adjustment Location : TAPE PREAMP board

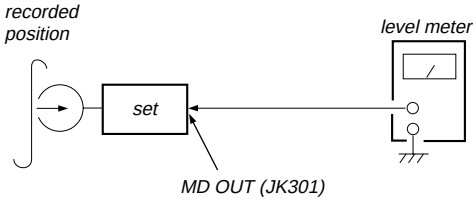
Record Bias Adjustment

Procedure :

1. Mode : Record



2. Mode : Playback



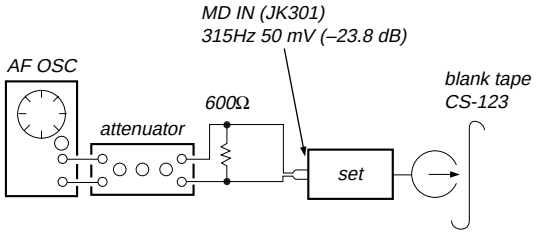
Confirm playback the signal recorded in step 1 become adjustment level as follows.
If these levels do not adjustment level, adjustment the VR701 (L-CH) and VR702 (R-CH) on the TAPE PREAMP board to repeat steps 1 and 2.

Adjustment level : Playback output of 10kHz level diffrence against 315Hz reference should be ±0.5 dB.
Adjustment Location : TAPE PREAMP board

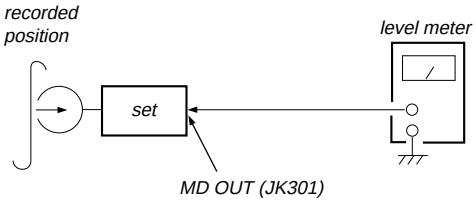
Record Level Adjustment

Procedure :

1. Mode: Record



2. Mode: Playback

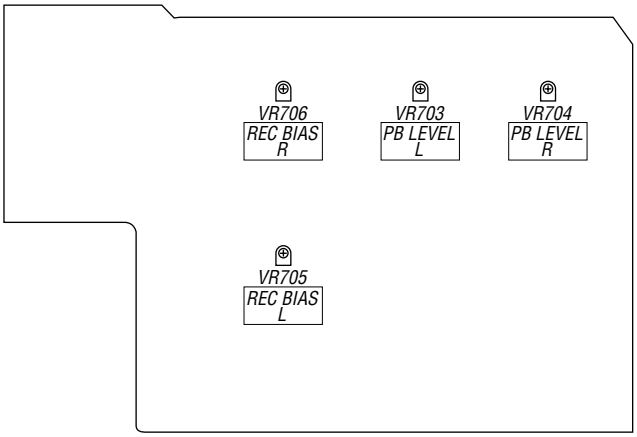


Confirm playback the signal recorded in step 1 become adjustment level as follows.
If these levels do not adjustment level, adjustment the VR705 (L-CH) and VR706 (R-CH) on the TAPE PREAMP board to repeat steps 1 and 2.

Adjustment level :
Playback level : 47.2 to 53.0 mV (–24.3 to –23.3 dB)
Adjustment Location : TAPE PREAMP board

Adjustment Location

[TAPE PREAMP BOARD] (Component Side)

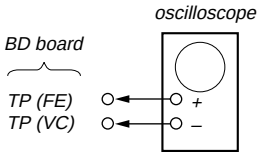


CD SECTION

Note:

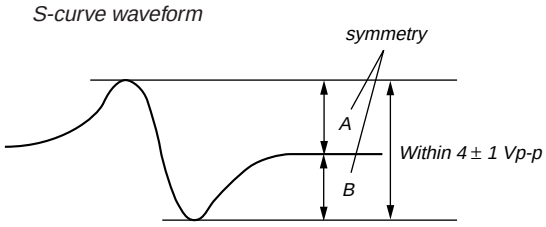
1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect the oscilloscope to test points TP (FE) and TP (VC).
2. Connect TP (FEI) and Ground, and TP (AGCCON) and Ground of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. With the disc (YEDS-18) loaded, press the ► button and perform focus search. (Focus search will be performed in the same way even while the disc table is pushed in and out.)
5. Check the symmetry and peak to peak level of the oscilloscope waveform (S curve) at this time.

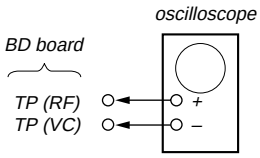


6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Checking Location : BD board

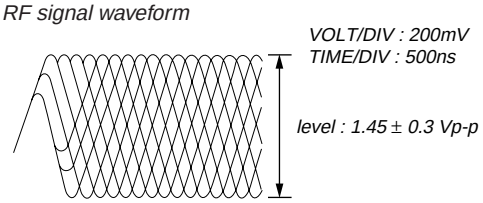
RF Level Check



Procedure :

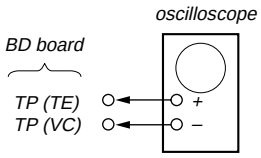
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Connect TP (AGCCON) and Ground of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. Put disc (YEDS-18) in and playback 5track.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.



Checking Location : BD board

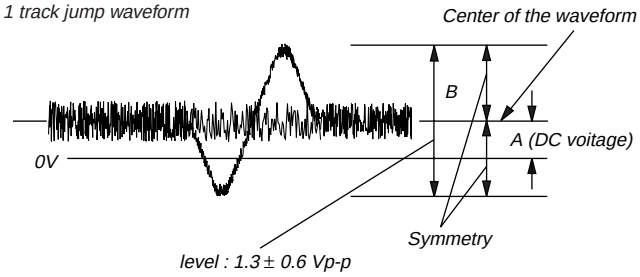
E-F Balance (1 Track Jump) check



Procedure:

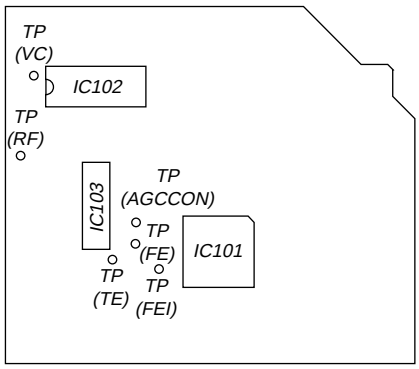
1. Connect oscilloscope to test point TP (TE) and TP (VC) on BD board.
2. Press the I/⏻ button to turn the unit ON.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the ► button.
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following:

   • A/B x 100 = less then ± 22 (%)
   • B = 1.3 ± 0.6 Vp-p



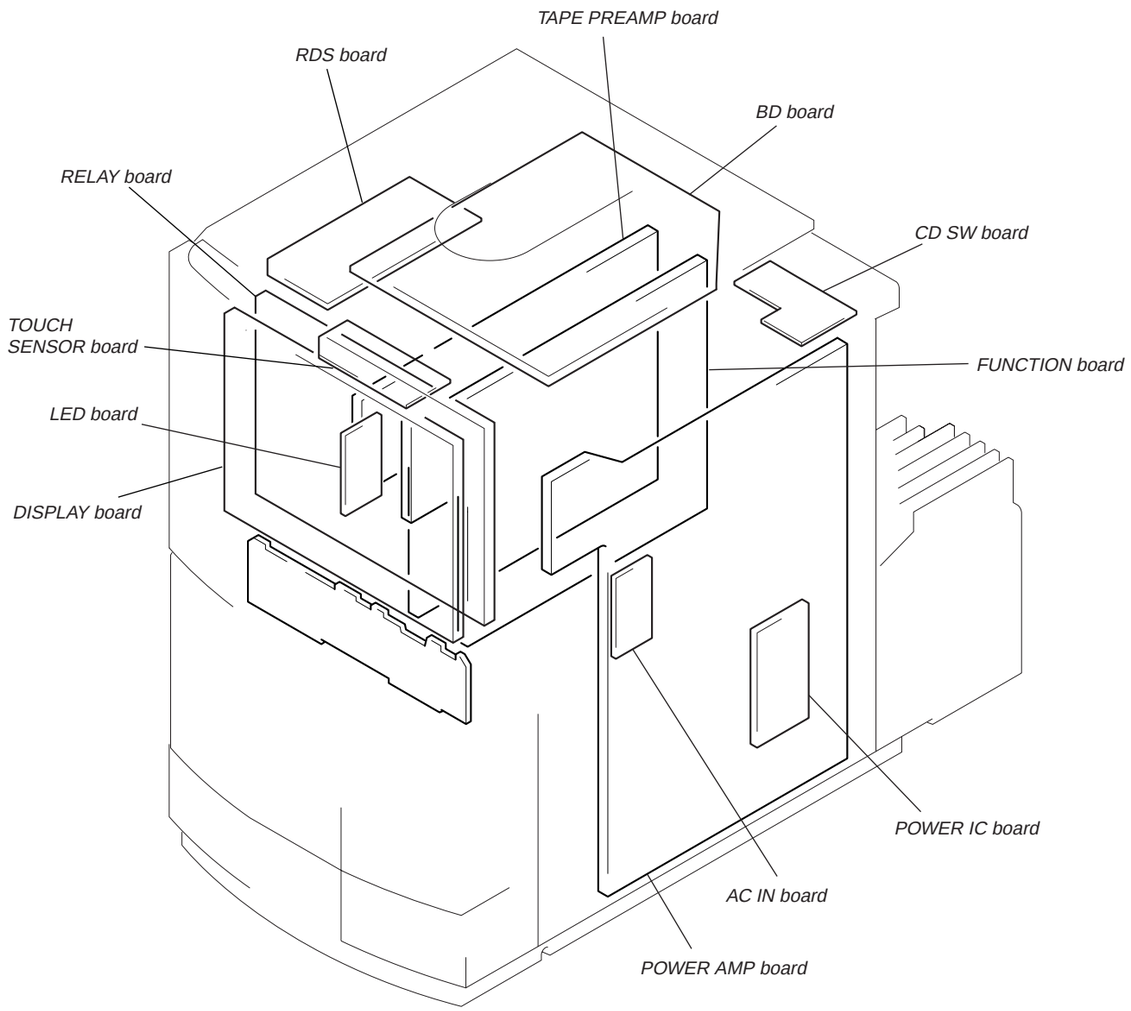
Checking Location : BD board

Checking Location : BD board
[BD BOARD] — SIDE B —



SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- B− : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : VIDEO
  - : PB (DECK A)
  - : REC
  - : CD
  - : CD (digital out)
- Abbreviation
  - CND : Canadian model.
  - SP : Singapore model.
  - MY : Malaysia model.
  - HK : Hong Kong model.
  - KR : korea model.
  - AUS : Australian model.

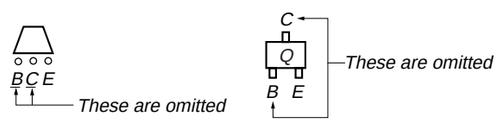
For printed wiring boards.

Note:

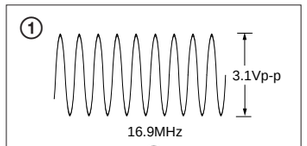
- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▒ : Pattern from the side which enables seeing.

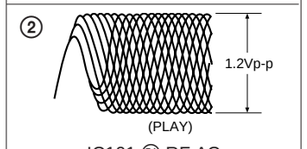
(The other layers' patterns are not indicated.)

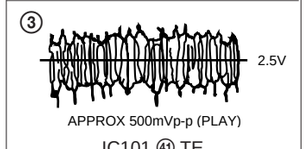
- **Indication of transistor**

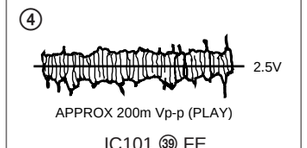


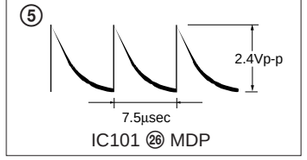
WAVEFORMS
– BD (CD) SECTION –



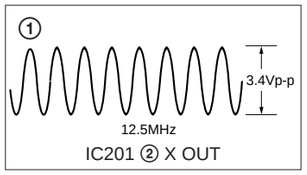








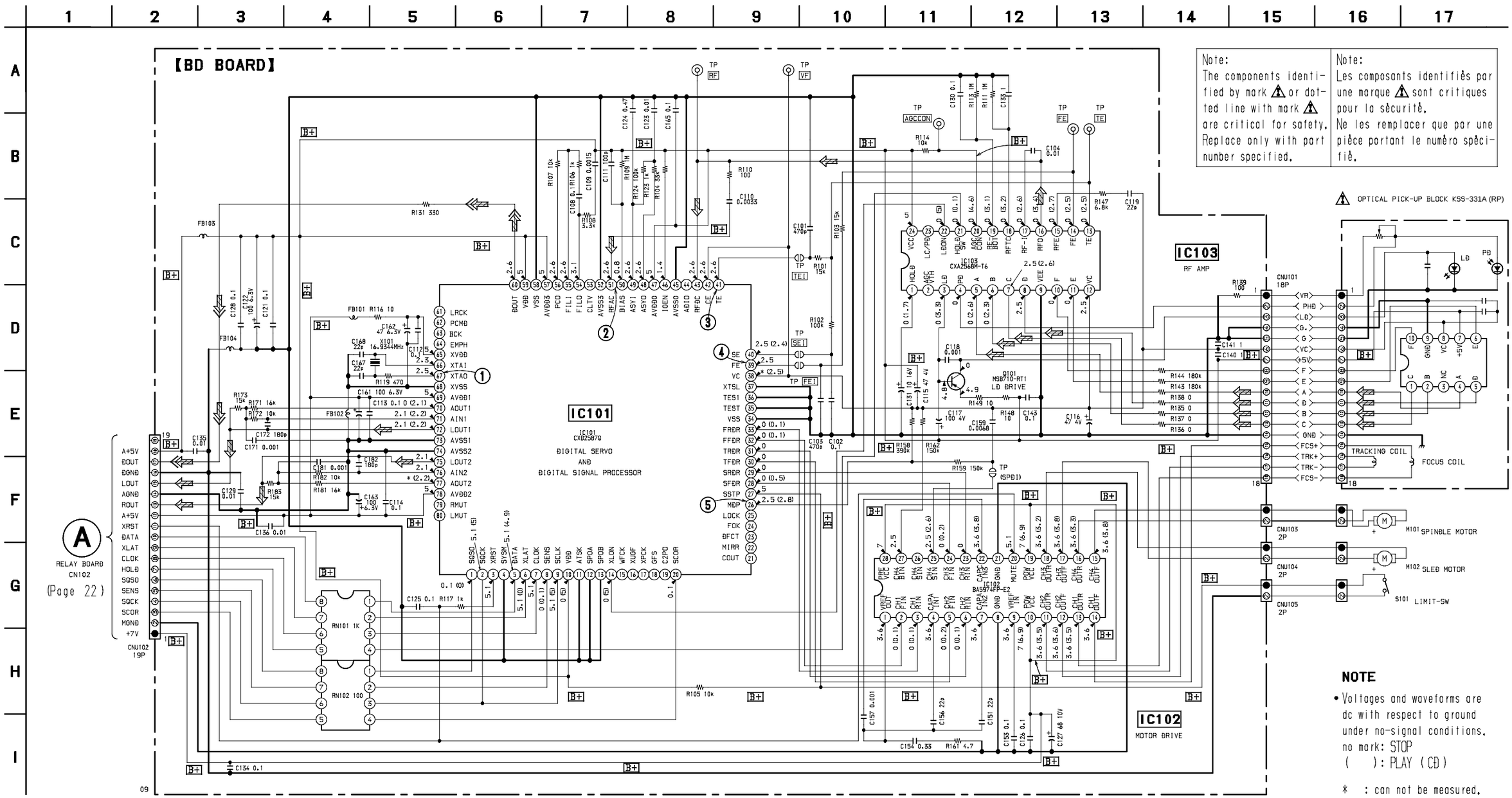
– DISPLAY SECTION –



13

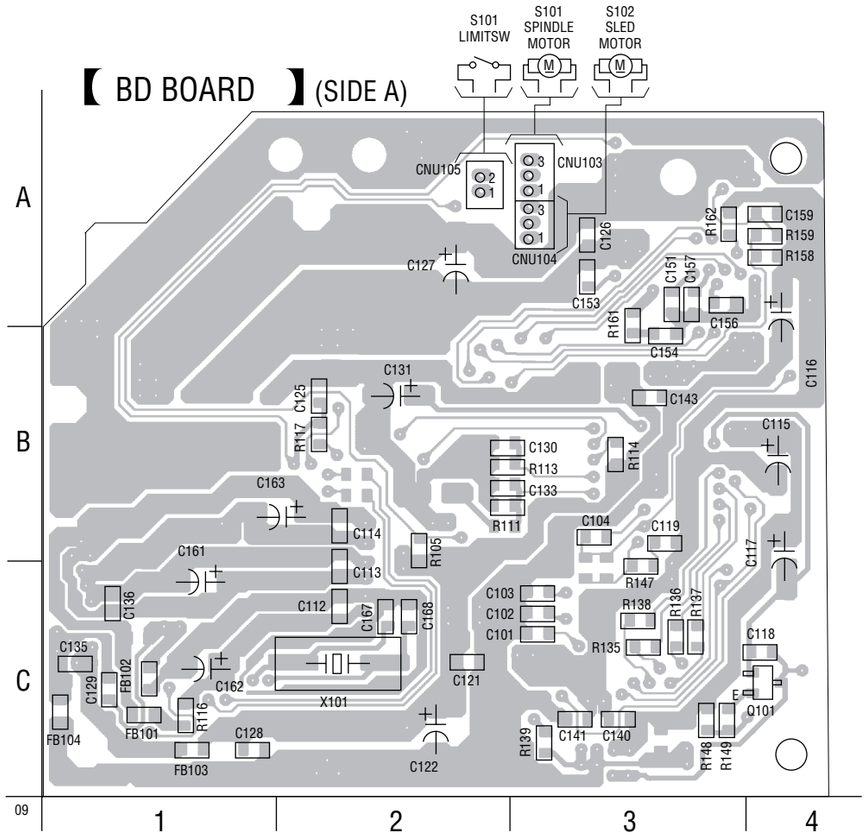
6-2. SCHEMATIC DIAGRAM – BD SECTION –

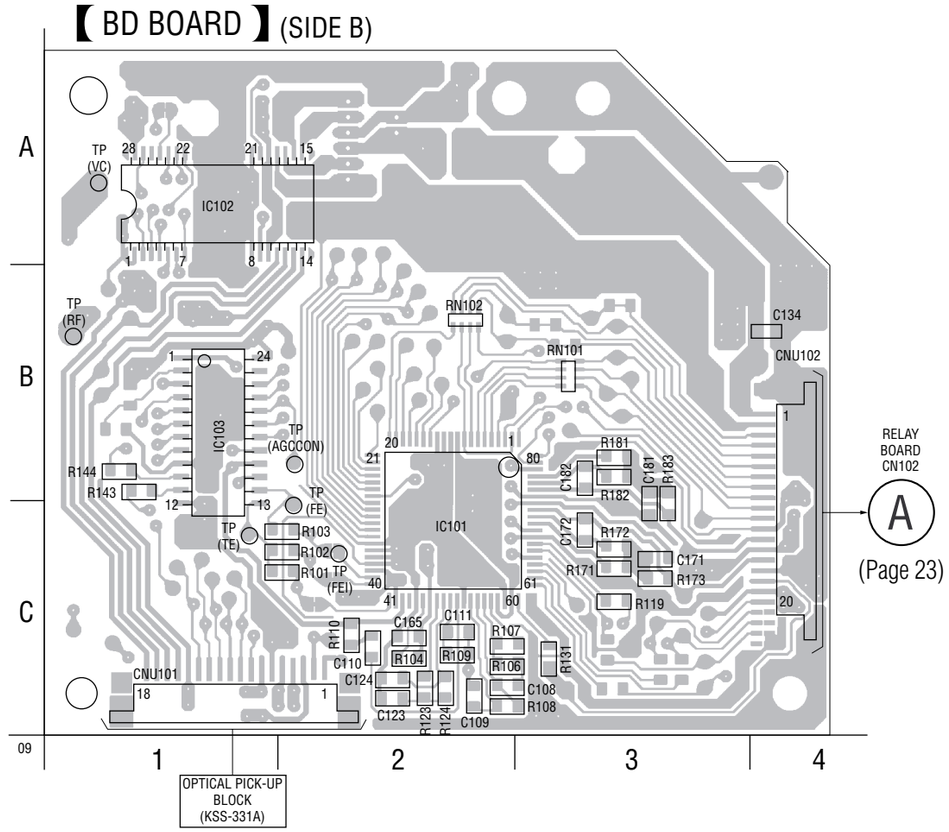
- See page 13 for Waveforms.
- See page 15 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.



6-3. PRINTED WIRING BOARD – BD SECTION –

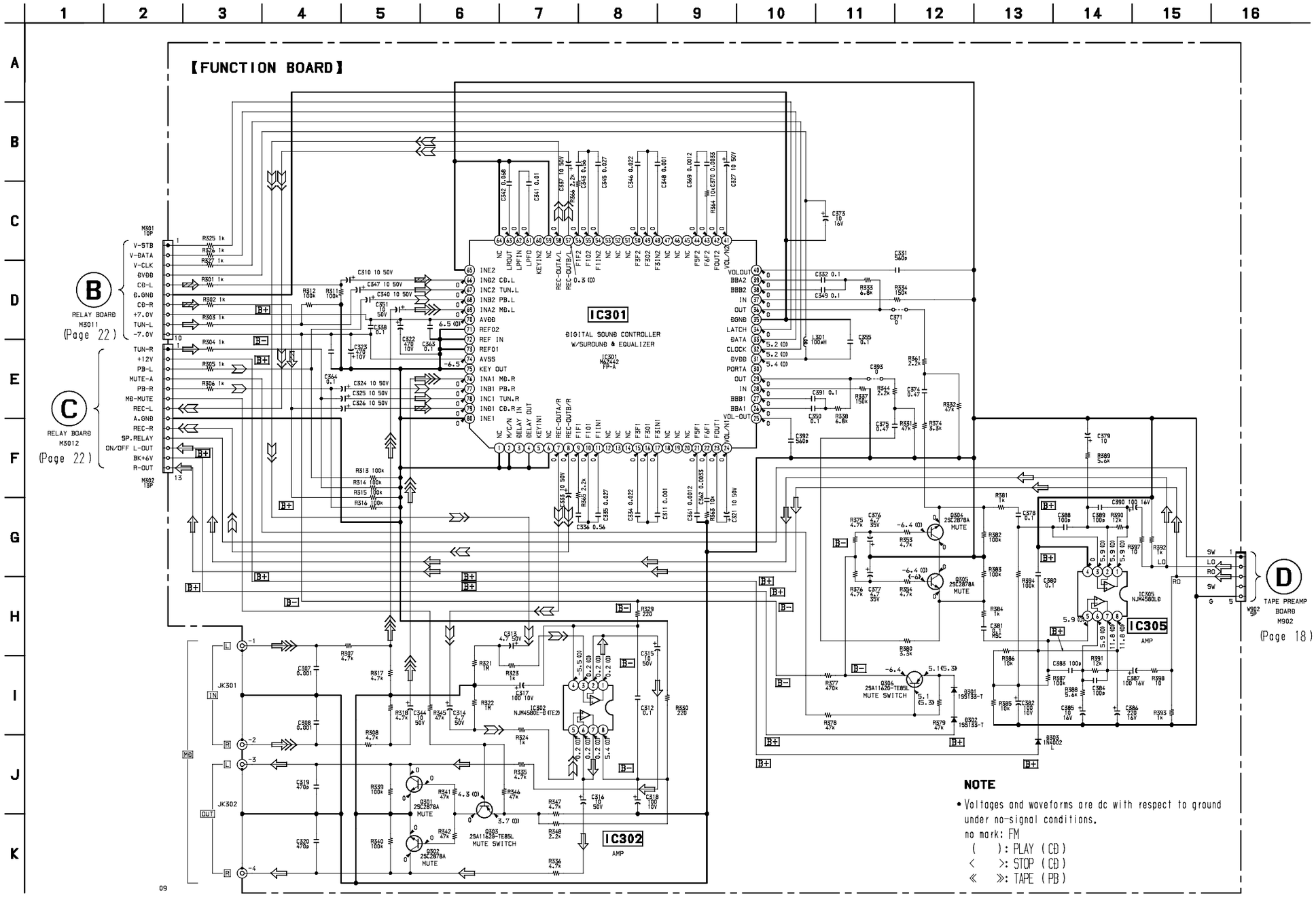
• See page 13 for Circuit Boards Location.





6-4. SCHEMATIC DIAGRAM – FUNCTION SECTION –

- See page 13 for Waveforms.
- See page 17 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.



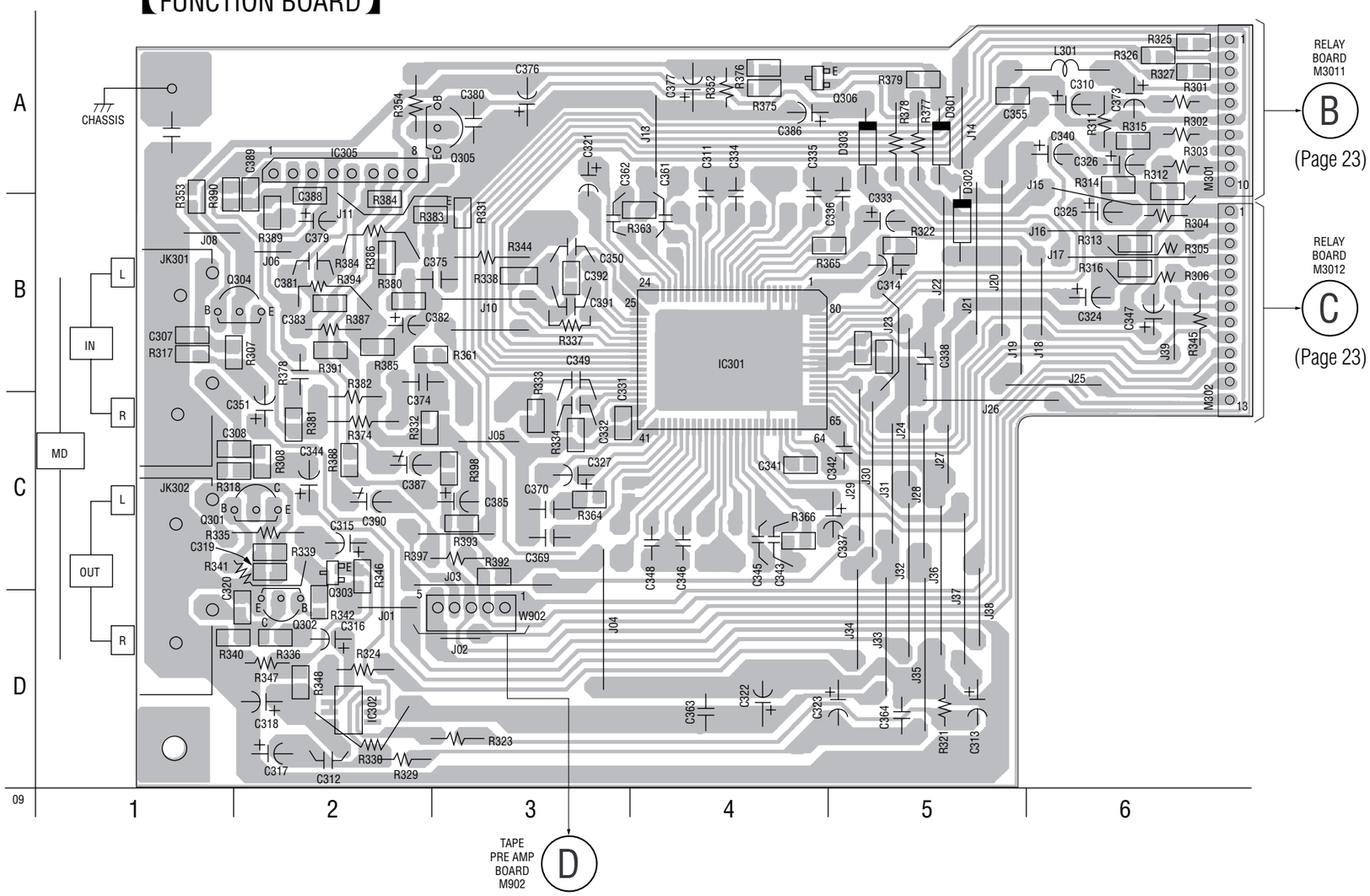
6-5. PRINTED WIRING BOARD – FUNCTION SECTION –

• See page 13 for Circuit Boards Location.

• Semiconductor Location

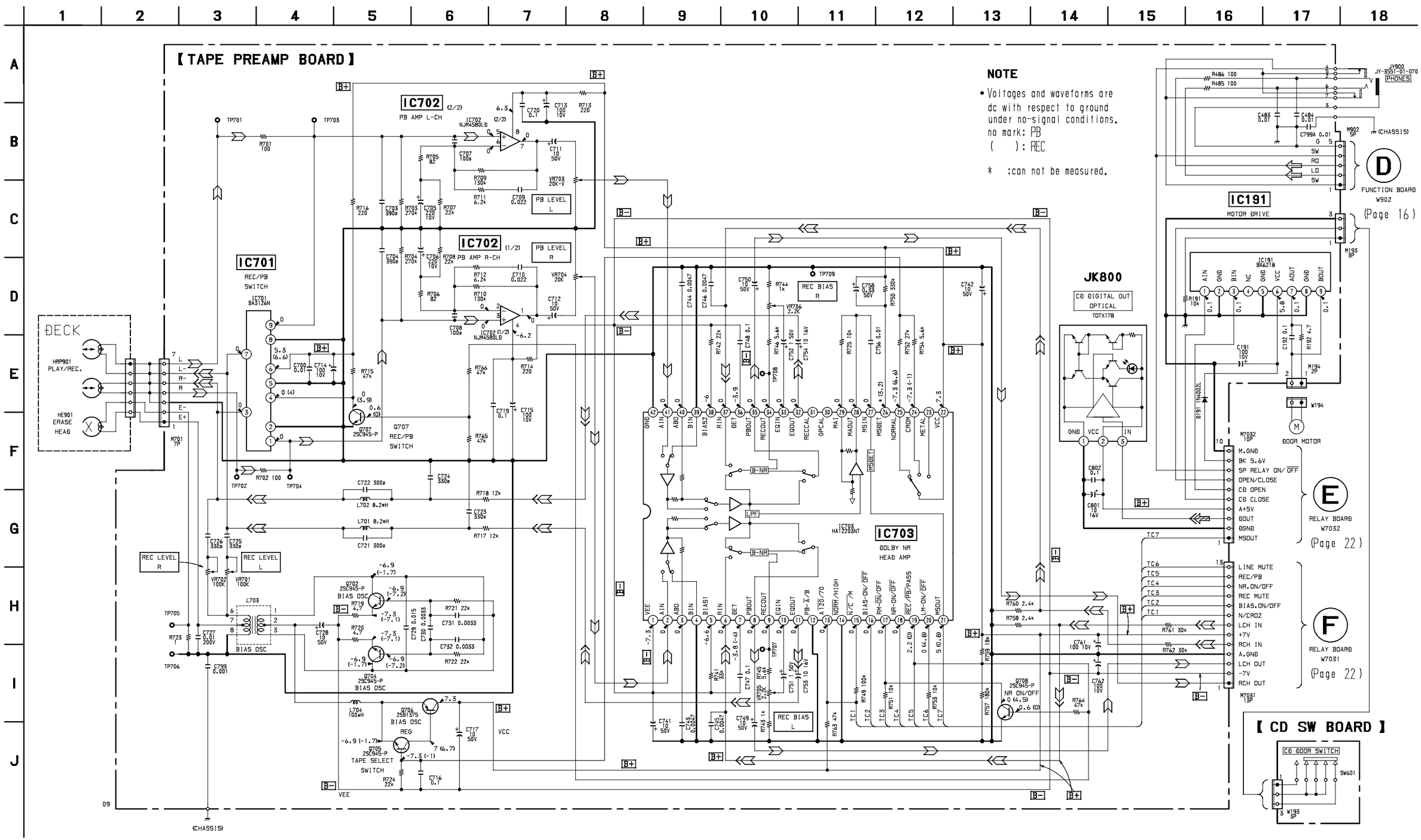
Ref. No.	Location
D301	A-5
D302	A-5
D303	A-5
IC301	B-4
IC302	D-2
IC305	A-2
Q301	C-2
Q302	C-2
Q303	C-2
Q304	B-1
Q305	A-3
Q306	A-2

【FUNCTION BOARD】



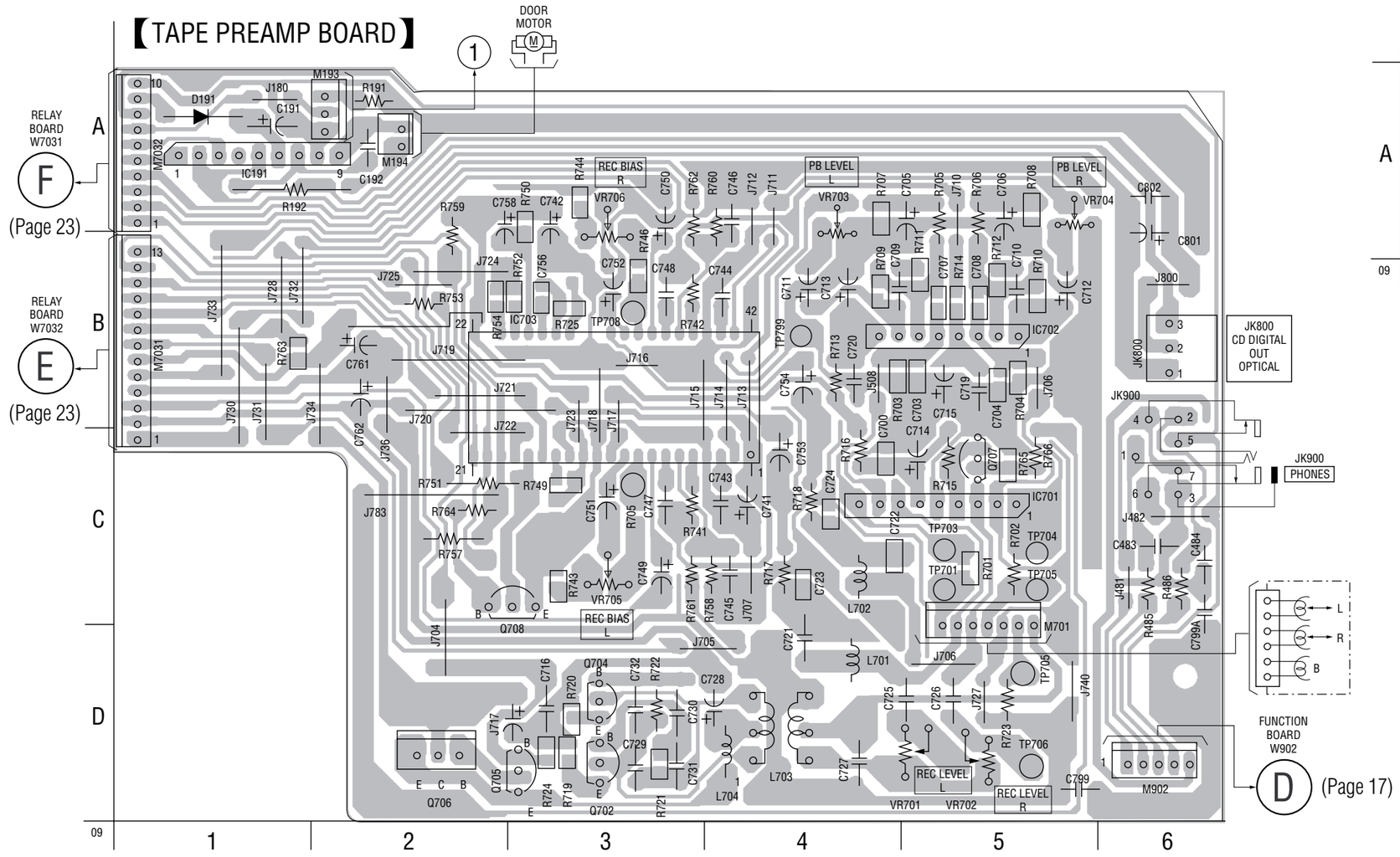
6-6. SCHEMATIC DIAGRAM – TAPE PREAMP SECTION –

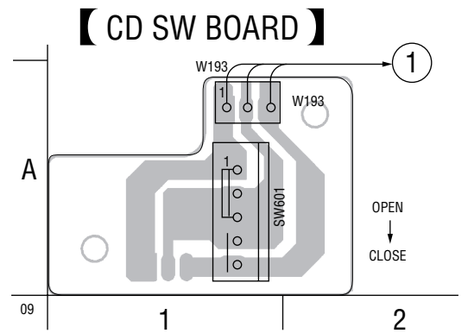
- See page 13 for Waveforms.
- See page 19 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.



6-7. PRINTED WIRING BOARD – TAPE PREAMP SECTION –

• See page 13 for Circuit Boards Location.



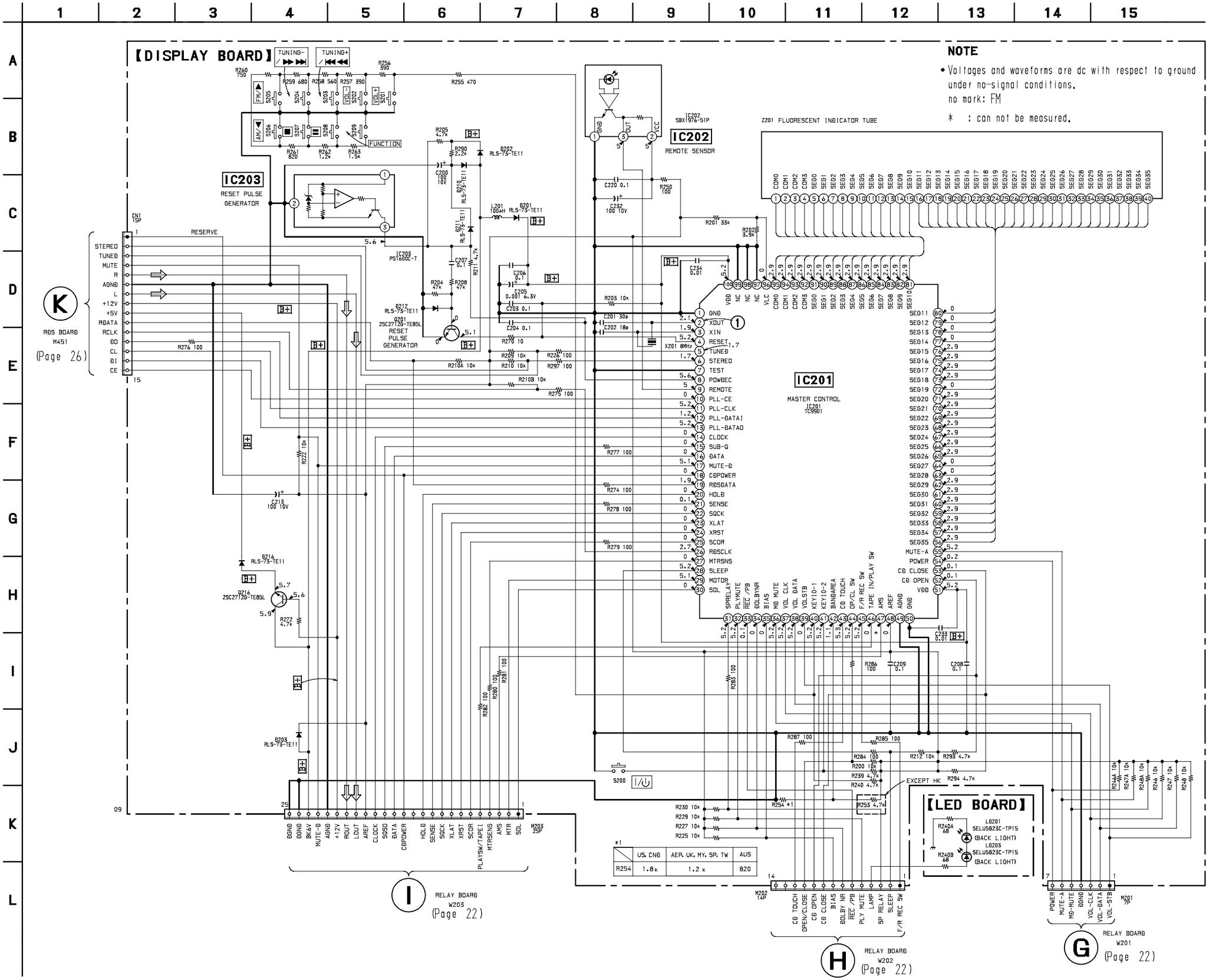


• **Semiconductor Location**

Ref. No.	Location
D191	A-1
IC191	A-1
IC701	C-5
IC702	B-5
IC703	B-3
Q702	D-3
Q704	D-3
Q705	D-3
Q706	D-2
Q707	C-5
Q708	C-2

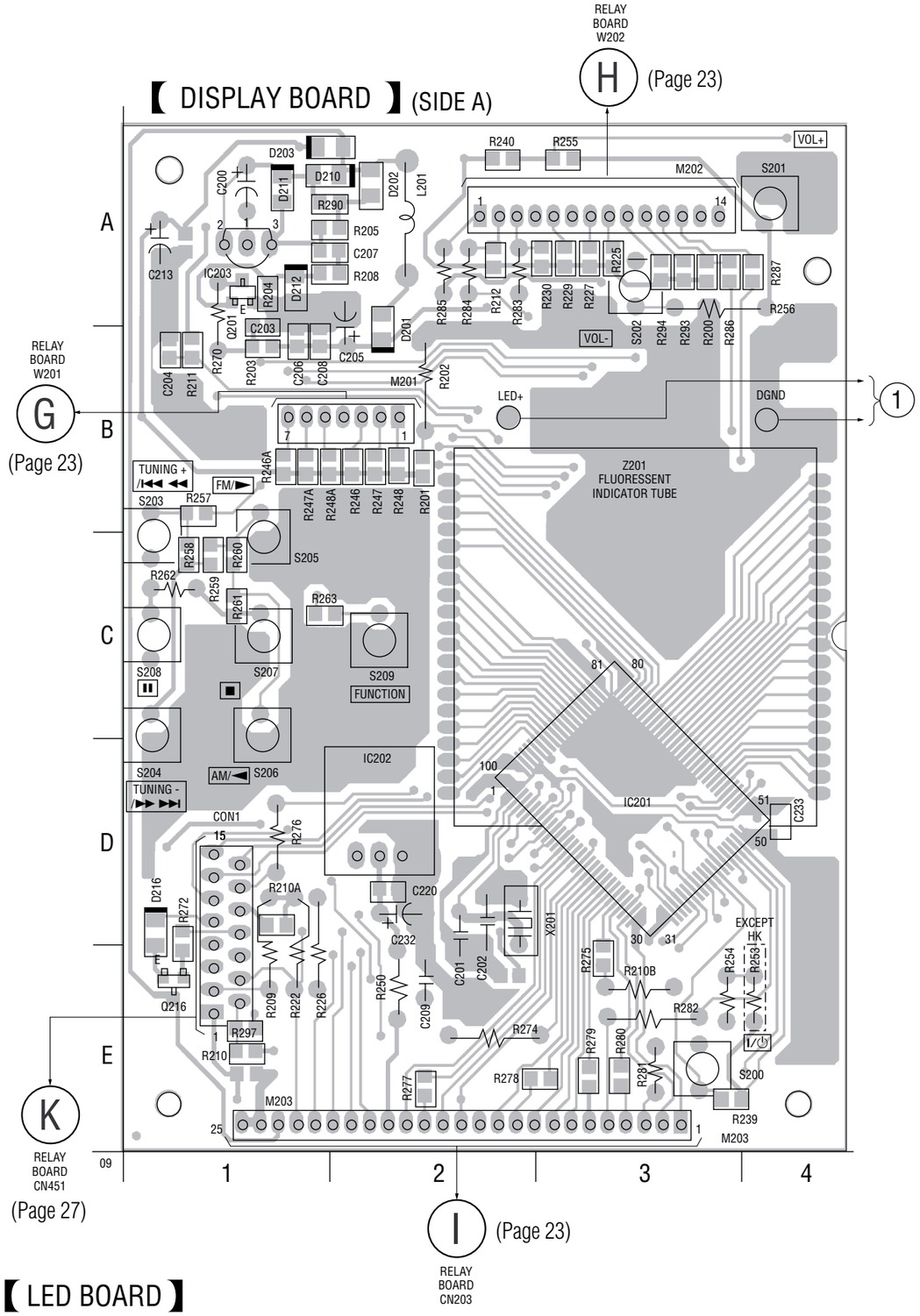
6-8. SCHEMATIC DIAGRAM – DISPLAY SECTION –

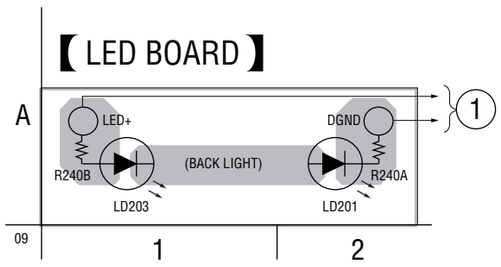
- See page 13 for Waveforms.
- See page 21 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.

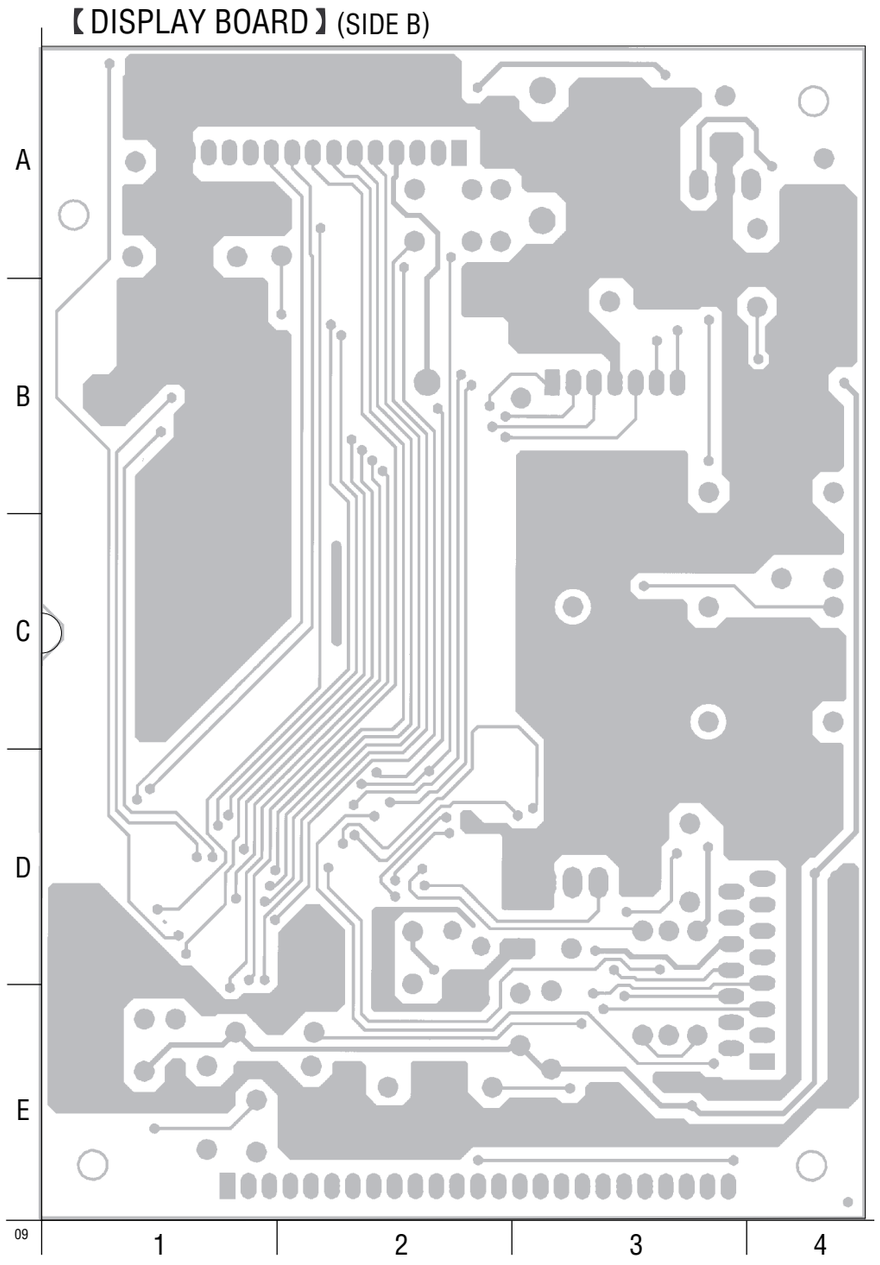


6-9. PRINTED WIRING BOARD – DISPLAY SECTION –

• See page 13 for Circuit Boards Location.







• Semiconductor Location

Ref. No.	Location
D201	B-2
D202	A-2
D203	A-1
D210	A-2
D211	A-1
D212	A-1
D216	D-1
IC201	D-3
IC202	D-2
IC203	A-1
Q201	A-1
Q216	E-1

6-10. SCHEMATIC DIAGRAM – RELAY SECTION –

- See page 13 for Waveforms.
- See page 23 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.

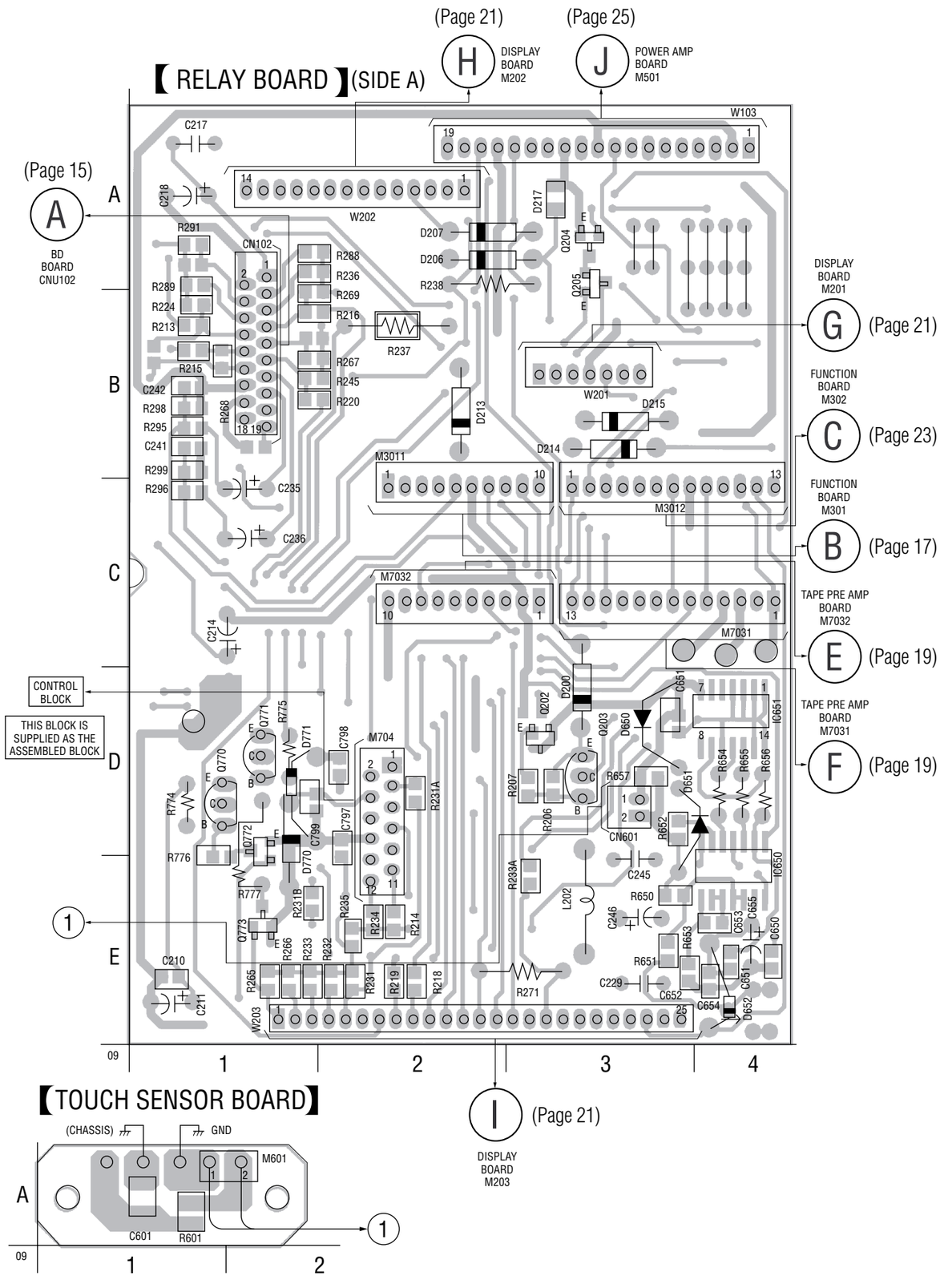
NOTE

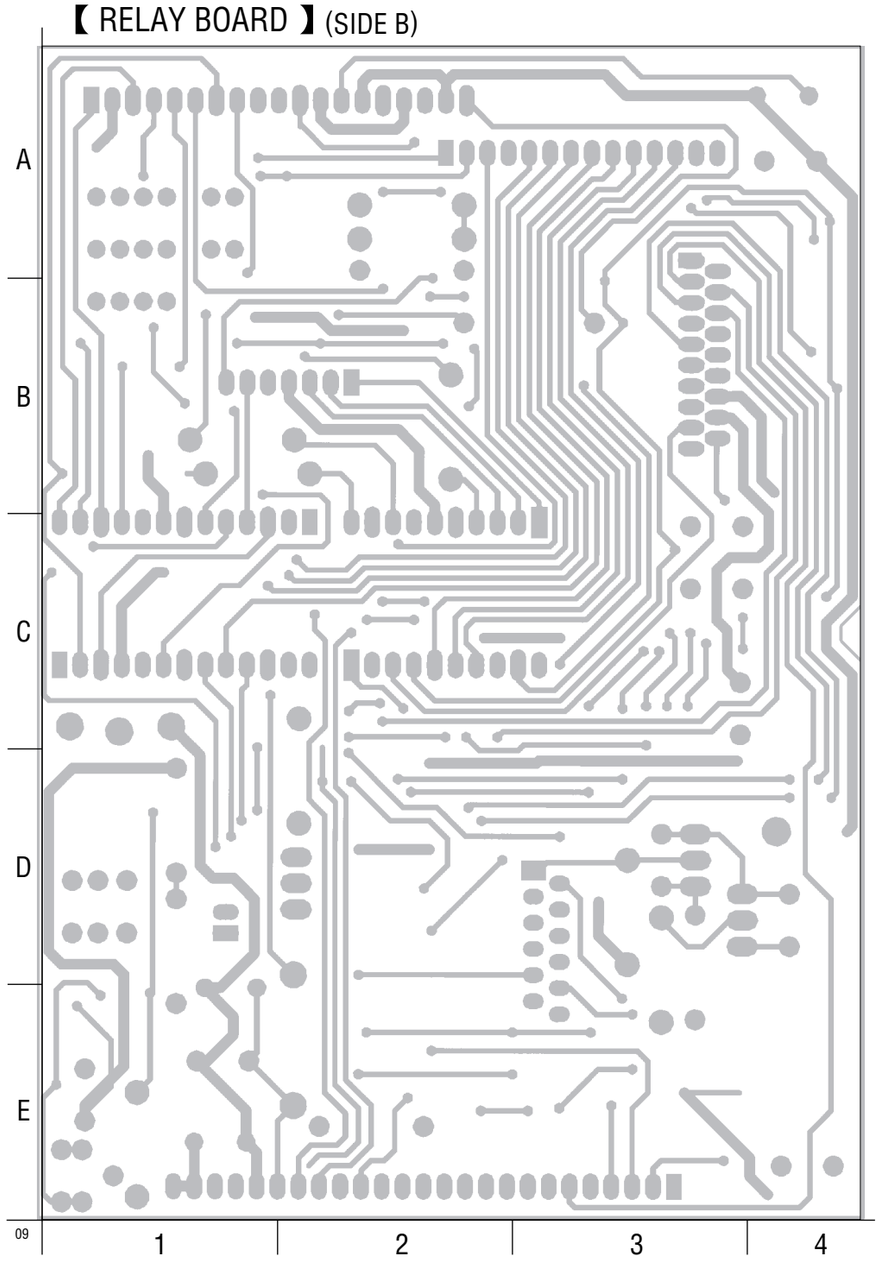
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: FM

【RELAY BOARD】

6-11. PRINTED WIRING BOARD – RELAY SECTION –

• See page 13 for Circuit Boards Location.



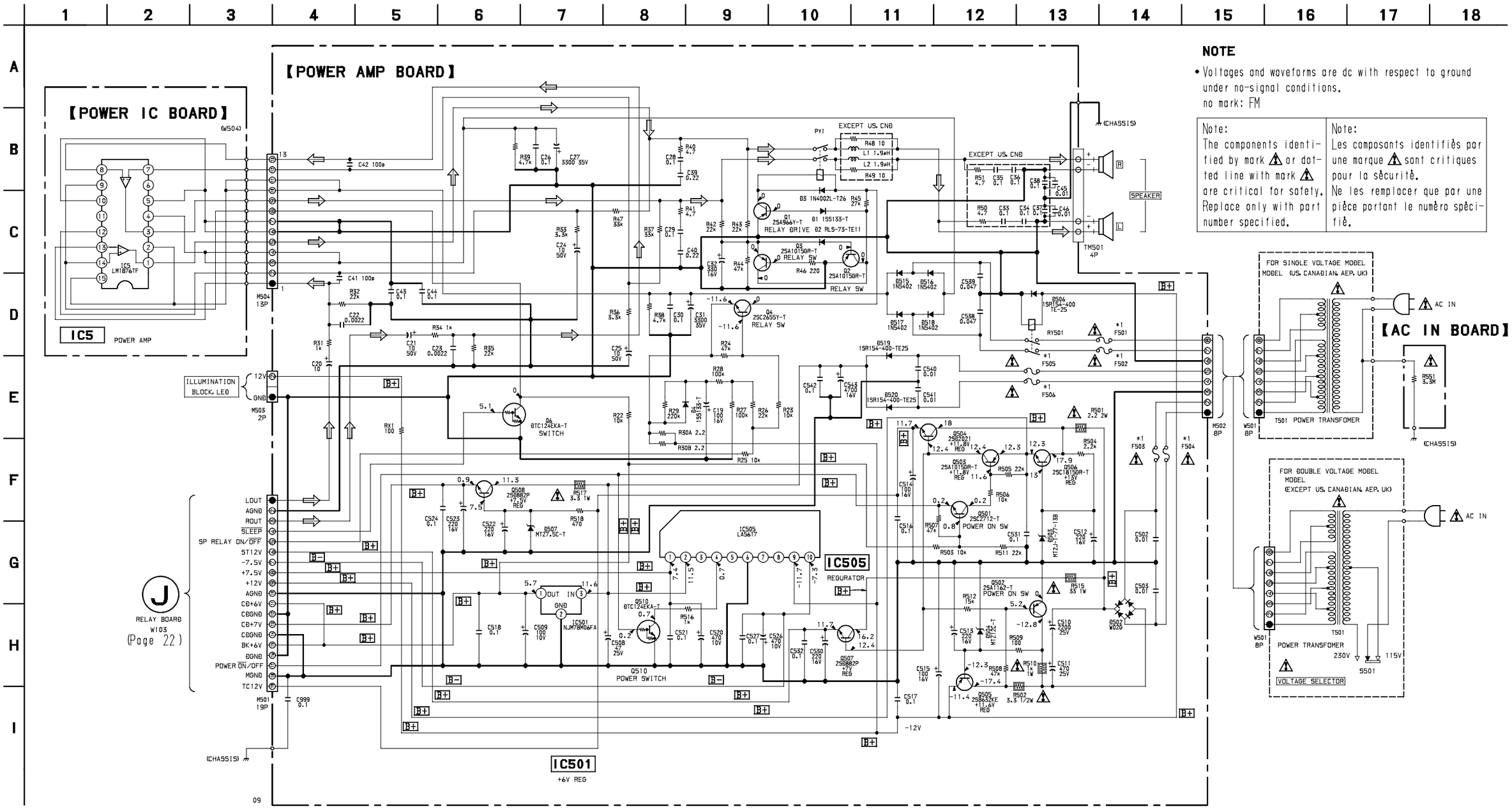


• Semiconductor Location

Ref. No.	Location
D200	D-3
D206	B-2
D207	A-2
D213	B-2
D214	B-3
D215	B-3
D650	D-4
D651	E-4
D652	E-4
D770	E-1
D771	D-1
IC650	E-4
IC651	D-4
Q202	D-3
Q203	D-3
Q204	A-3
Q205	B-3
Q770	D-1
Q771	D-1
Q772	D-1
Q773	E-1

6-12. SCHEMATIC DIAGRAM – POWER SECTION –

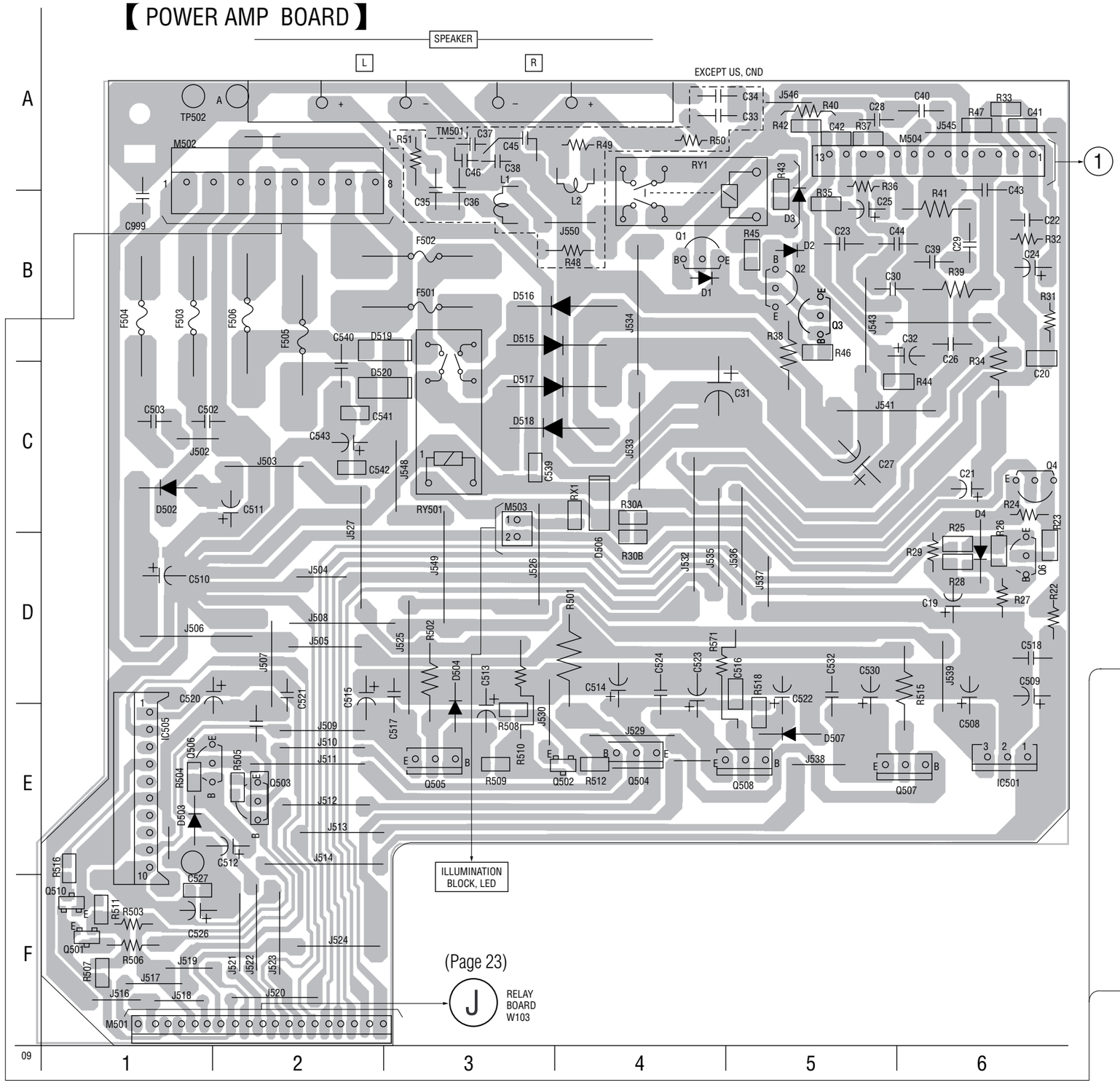
- See page 13 for Waveforms.
- See page 25 for Printed Wiring Board.
- See page 28 for IC Block Diagrams.
- See page 30 for IC Pin Functions.



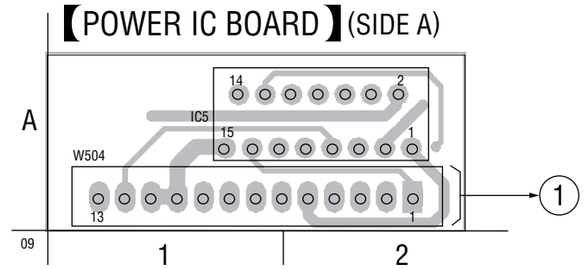
6-13. PRINTED WIRING BOARD – POWER SECTION –

• See page 13 for Circuit Boards Location.

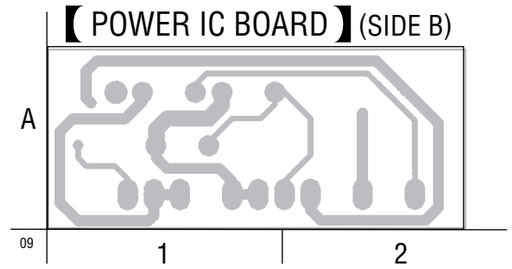
【 POWER AMP BOARD 】



【 POWER IC BOARD 】(SIDE A)

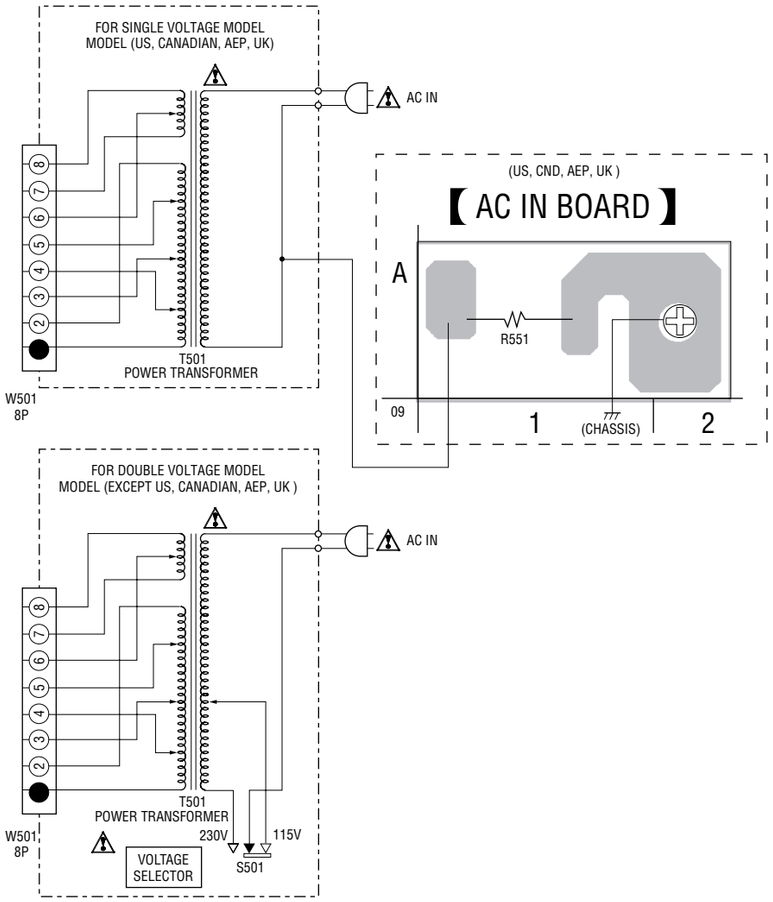


【 POWER IC BOARD 】(SIDE B)



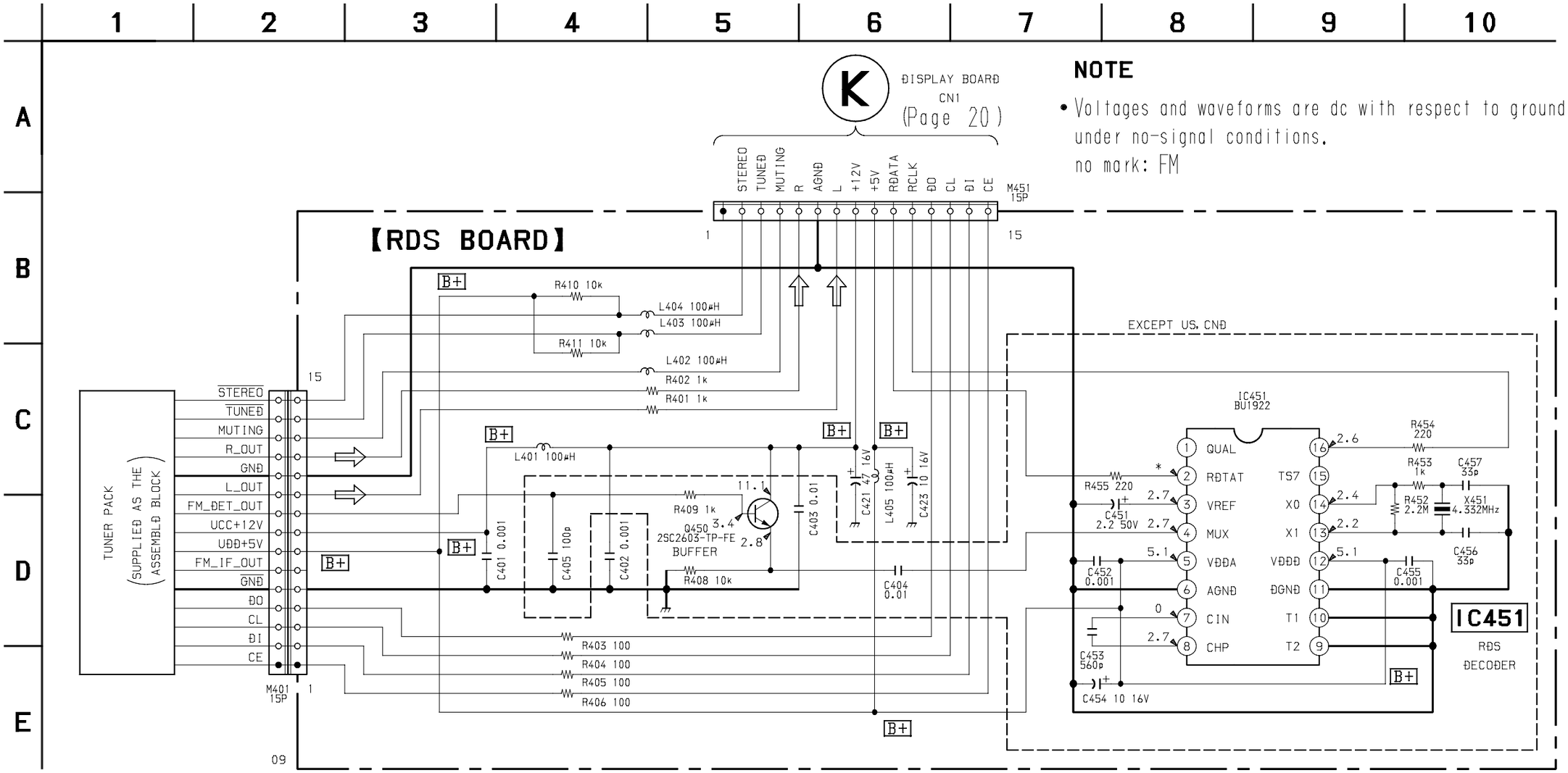
• **Semiconductor Location**

Ref. No.	Location
D1	B-4
D2	B-5
D3	A-5
D4	D-6
D502	C-1
D503	E-1
D504	D-3
D506	C-4
D507	D-5
D515	B-3
D516	B-4
D517	B-3
D518	C-3
D519	B-2
D520	B-2
IC501	E-6
IC505	E-1
Q1	B-4
Q2	B-5
Q3	B-5
Q4	C-6
Q6	D-6
Q501	F-1
Q502	E-4
Q504	E-4
Q505	E-3
Q506	E-6
Q507	F-1
Q508	E-5
Q510	F-1



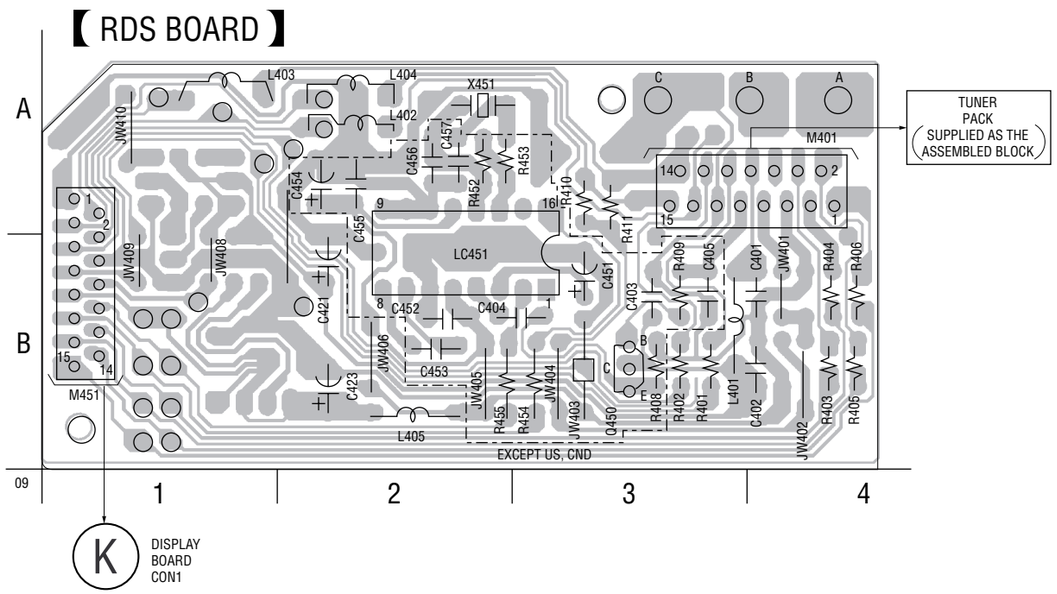
6-14. SCEMATIC DIAGRAM – RDS SECTION –

- **See page 13 for Waveforms.**
- **See page 27 for Printed Wiring Board.**
- **See page 28 for IC Block Diagrams.**
- **See page 30 for IC Pin Functions.**



6-15. PRINTED WIRING BOARD – RDS SECTION –

• See page 13 for Circuit Boards Location.

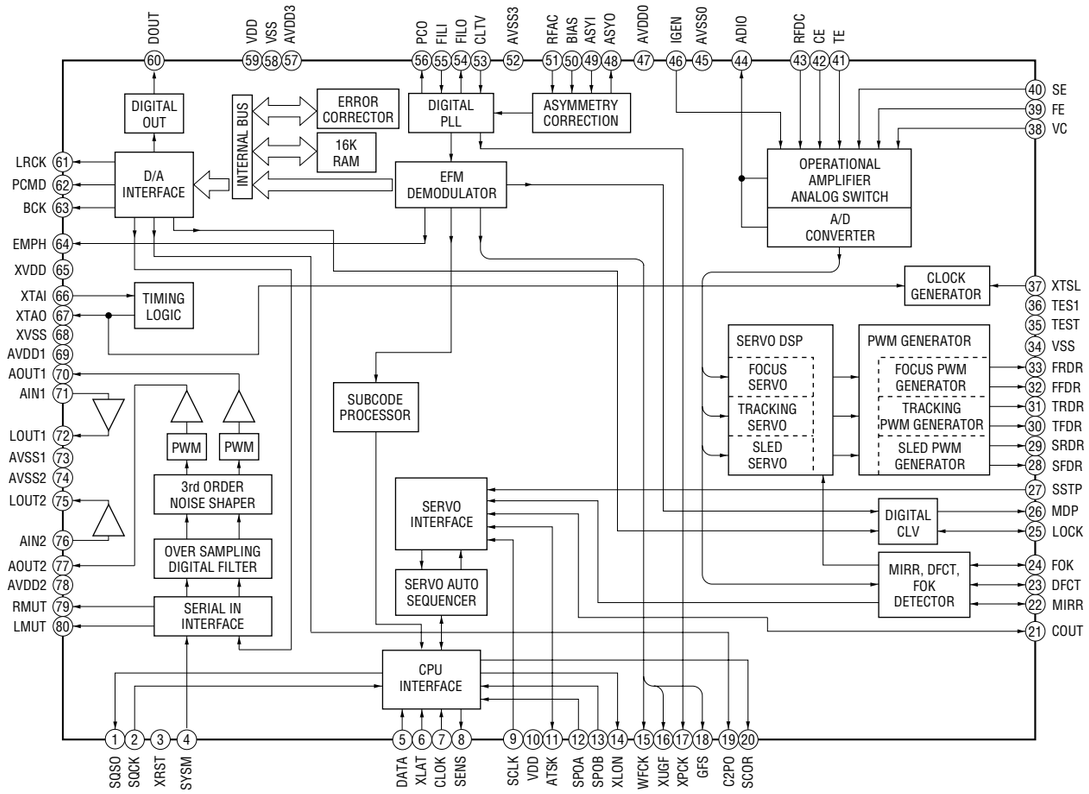


(Page 21)

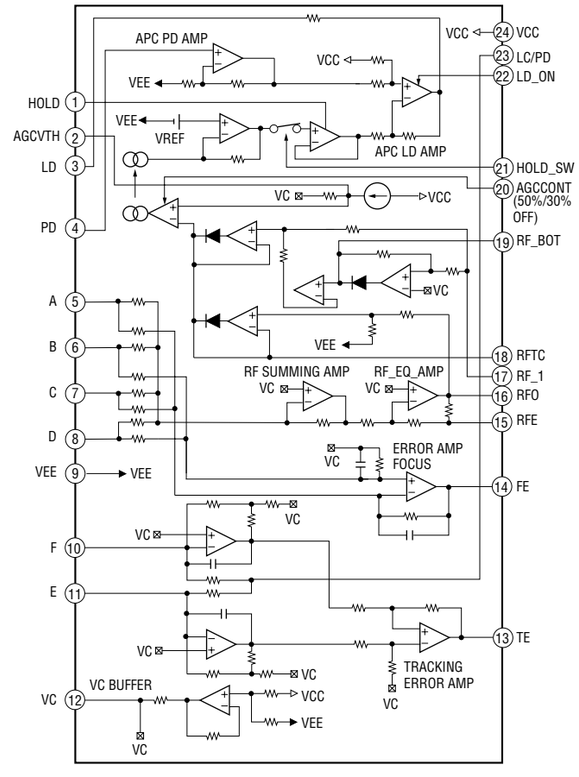
6-16. IC BLOCK DIAGRAMS

• BD Board

IC101 CXD2587Q

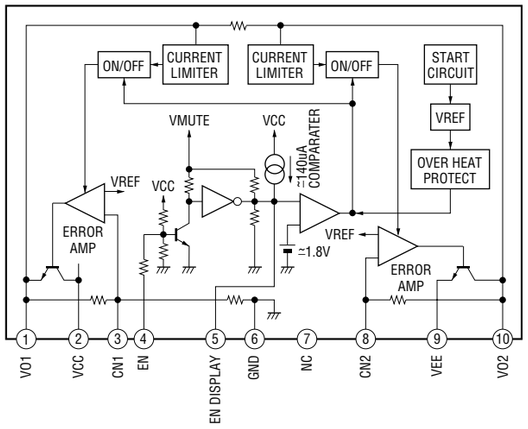


IC103 CXA2568M-T6



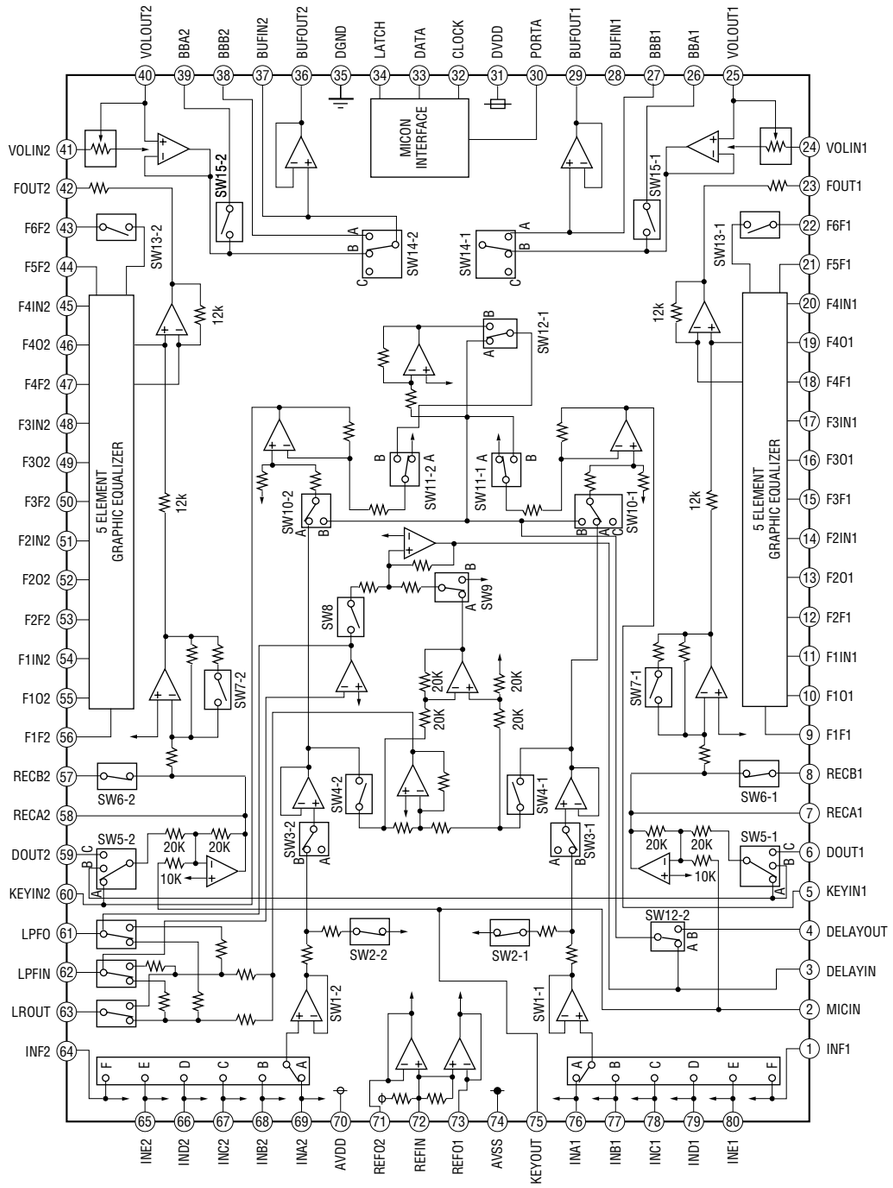
• POWER AMP Board

IC505 LA5617



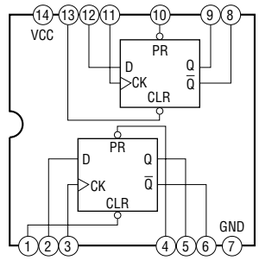
• FUNCTION Board

IC301 M62442



• RELAY Board

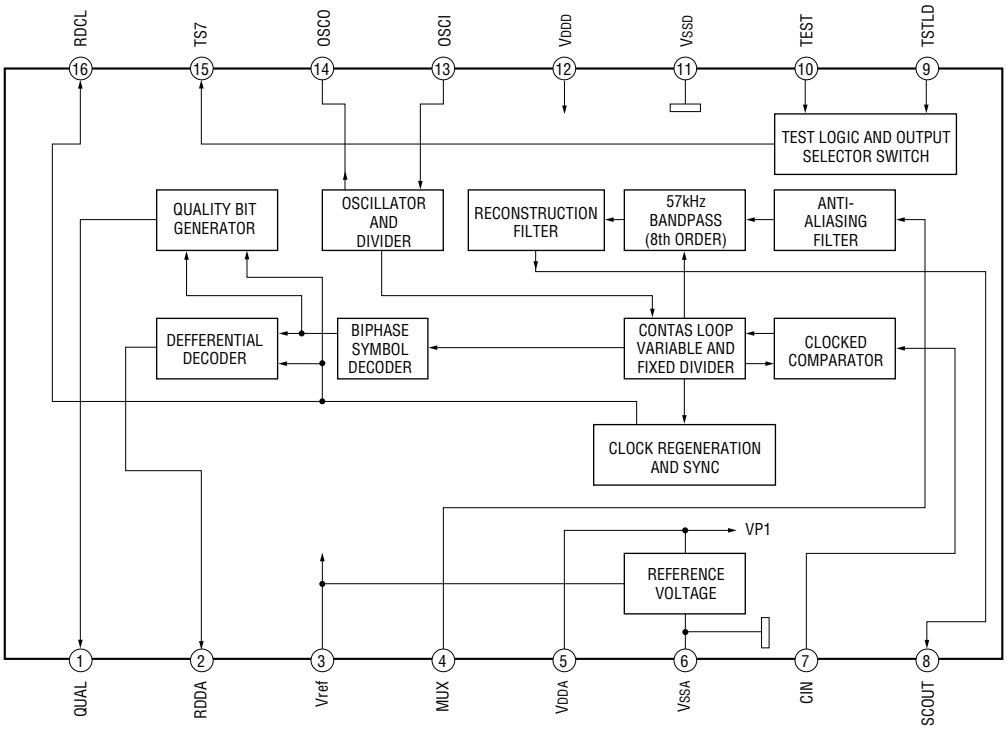
IC650, 651 SN74HC74ANS



28

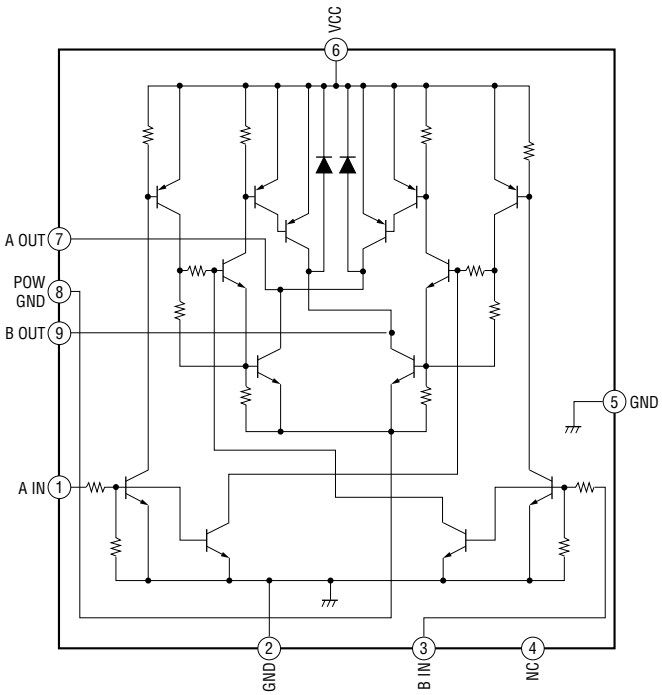
• RDS Board

IC451 BU1922



• TAPE PREAMP Board

IC191 BA6218



6-17. IC PIN FUNCTIONS

• IC201 MASTER CONTROL (TC9901) (DYSPLAY Board)

Pin No.	Pin Name	I/O	Function
1	GND	I	GND
2	XOUT	O	8MHz Oscillator
3	XIN	I	8MHz Oscillator
4	RESET	I	CPU reset input
5	TUNED	I	Station detector input
6	STEREO	I	Stereo signal input
7	TEST	I	No Use, Tied to low
8	POWDEC	I	Power down detect
9	REMOTE	I	Remote signal input
10	PLL-CE	O	LC72131 chip enable output
11	PLL-CLK	O	LC72131 clock output
12	PLL-DATAI	I	LC72131 data input
13	PLL-DATAO	O	LC72131 data output
14	CLOCK	O	Servo command clock output
15	SUB-Q	I	Servo subq data & status input
16	DATA	O	Servo command data output
17	MUTE_D	O	Digital mute control output
18	CDPORWER	O	CD power supply
19	RDS-DATA	I	BU1922 RDS data input
20	HOLD	O	Servo search Hi output
21	SENSE	I	Servo status SENSE input
22	SQCK	O	Servo subq/sense read clock output
23	XLAT	O	Servo command latch output
24	XRST	O	Servo chip reset output
25	SCOR	I	Servo SUBQ sync input
26	RDS_CLK	I	BU1922 RDS clock input
27	MTRSNS	I	Tape motor reel sense input
28	SLEEP	O	Digital Amp sleep control
29	MOTOR	O	Tape control output for Motor
30	SOL	O	Tape control output for Solenoid
31	SPRELAY	O	Power on/off RELAY control
32	PLYMUTE	O	Tape play back mute signal output
33	$\overline{\text{REC}}$/PB	O	Tape control output for REC/PB
34	DOLBYNR	O	Tape control output for DOLBY NR
35	BIAS	O	Tape control output for BIAS
36	MDMUTE	O	MD/REC ON mute output
37	VOL-CLK	O	M62442 audio control clock output
38	VOL-DATA	O	M62442 audio control data output
39	VOL-STB	O	M62442 audio control strobe output
40	KEYIO-1	I	AD key input (16 keys)
41	KEYIO-2	I	AD key input (16 keys)
42	BANDAREA	I	Band area option
43	CDTOUCH	I	CD door open/close touch sensor
44	OP/CL SW	I	CD loading open/close sw open = 2.5V, close = 0V

Pin No.	Pin Name	I/O	Function
45	FRECSW / RRECSW	I	Tape forward/reverse record sw input 1.7V (2k4) = frecsw on & rrecsw on 2.25V (3k9) = frecsw on & rrecsw off 2.89V (6k8) = frecsw off & rrecsw on 5V = frecsw off & rrecsw off
46	PLAYSW / TAPEIN	I	Tape play/tape in sw input 1.7V (2k4) = play sw on & tape in sw on 2.25V (3k9) = Play sw on & tape in sw off 2.89V (6k8) = Play sw off & tape in sw on 5V = play sw off & tape in sw off
47	AMS	I	Tape music search input (HI = music)
48	AREF	I	A/D convert refrence input (+5v)
49	AGND	I	A/D convert Input GND input
50	GND	I	GND
51	VDD	I	+5V
52	OPEN	O	CD loading open motor on
53	CLOSE	O	CD loading close motor on
54	POWER	O	System power output
55	MUTE-A	O	Audio mute cuntrol output
56	SEG35	O	LCD segment output
57	SEG34	O	
58	SEG33	O	
59	SEG32	O	
60	SEG31	O	
61	SEG30	O	
62	SEG29	O	
63	SEG28	O	
64	SEG27	O	
65	SEG26	O	
66	SEG25	O	
67	SEG24	O	
68	SEG23	O	
69	SEG22	O	
70	SEG21	O	
71	SEG20	O	
72	SEG19	O	
73	SEG18	O	
74	SEG17	O	
75	SEG16	O	
76	SEG15	O	
77	SEG14	O	
78	SEG13	O	
79	SEG12	O	
80	SEG11	O	
81	SEG10	O	

Pin No.	Pin Name	I/O	Function
82	SEG9	O	LCD segment output
83	SEG8	O	
84	SEG7	O	
85	SEG6	O	
86	SEG5	O	
87	SEG4	O	
88	SEG3	O	
89	SEG2	O	
90	SEG1	O	
91	SEG0	O	
92	COM3	O	LCD common 3 output
93	COM2	O	LCD common 2 output
94	COM1	O	LCD common 1 output
95	COM0	O	LCD common 0 output
96	VLC	O	LCD drive power supply
97	NC	–	No connect
98	NC	–	No connect
99	NC	–	No connect
100	VDD	I	+5V

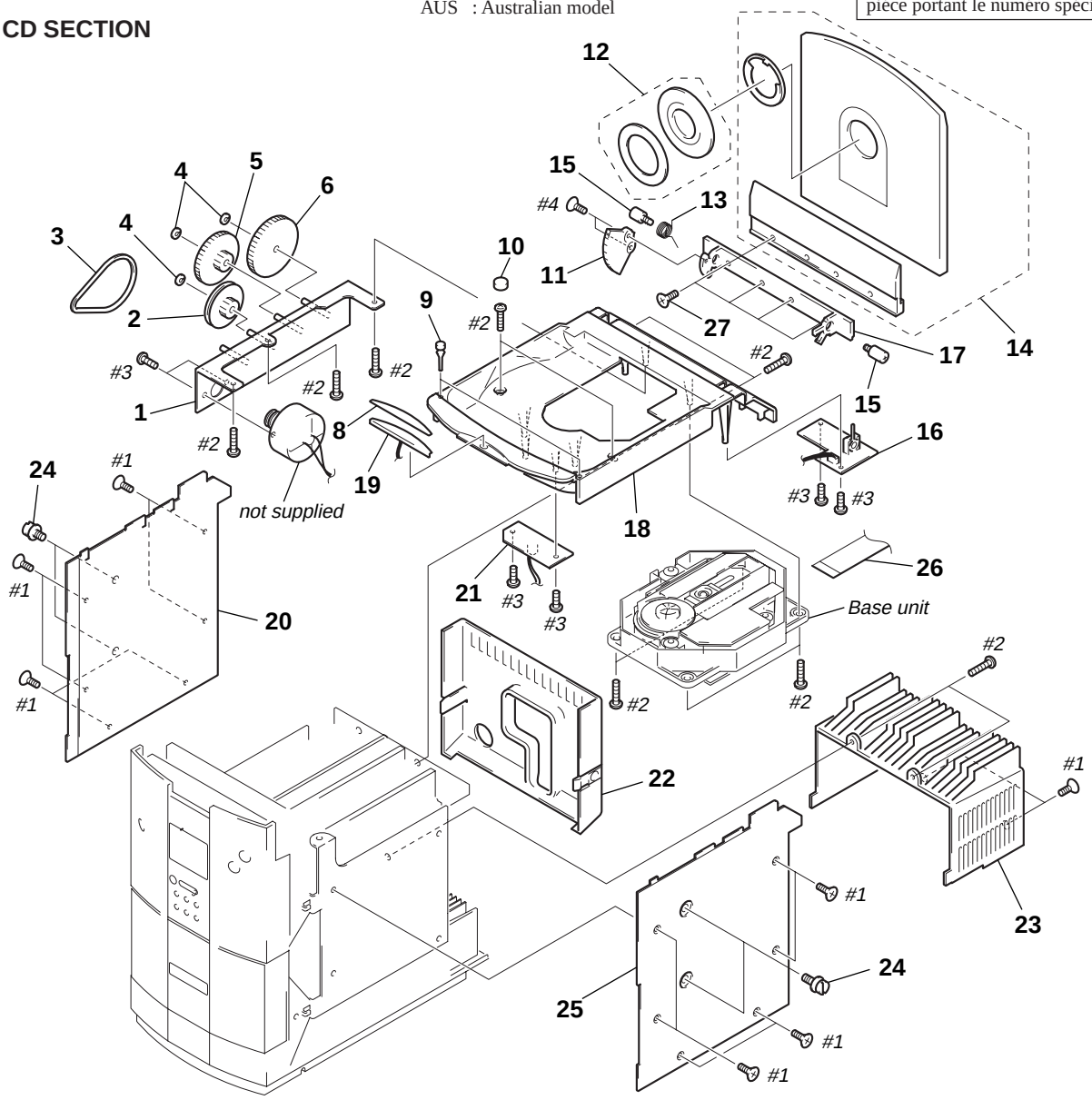
SECTION 7
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model
  HK : Hong Kong model
  SP : Singapore model
  MY : Malaysia model
  KR : Korean model
  TW : Taiwan model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

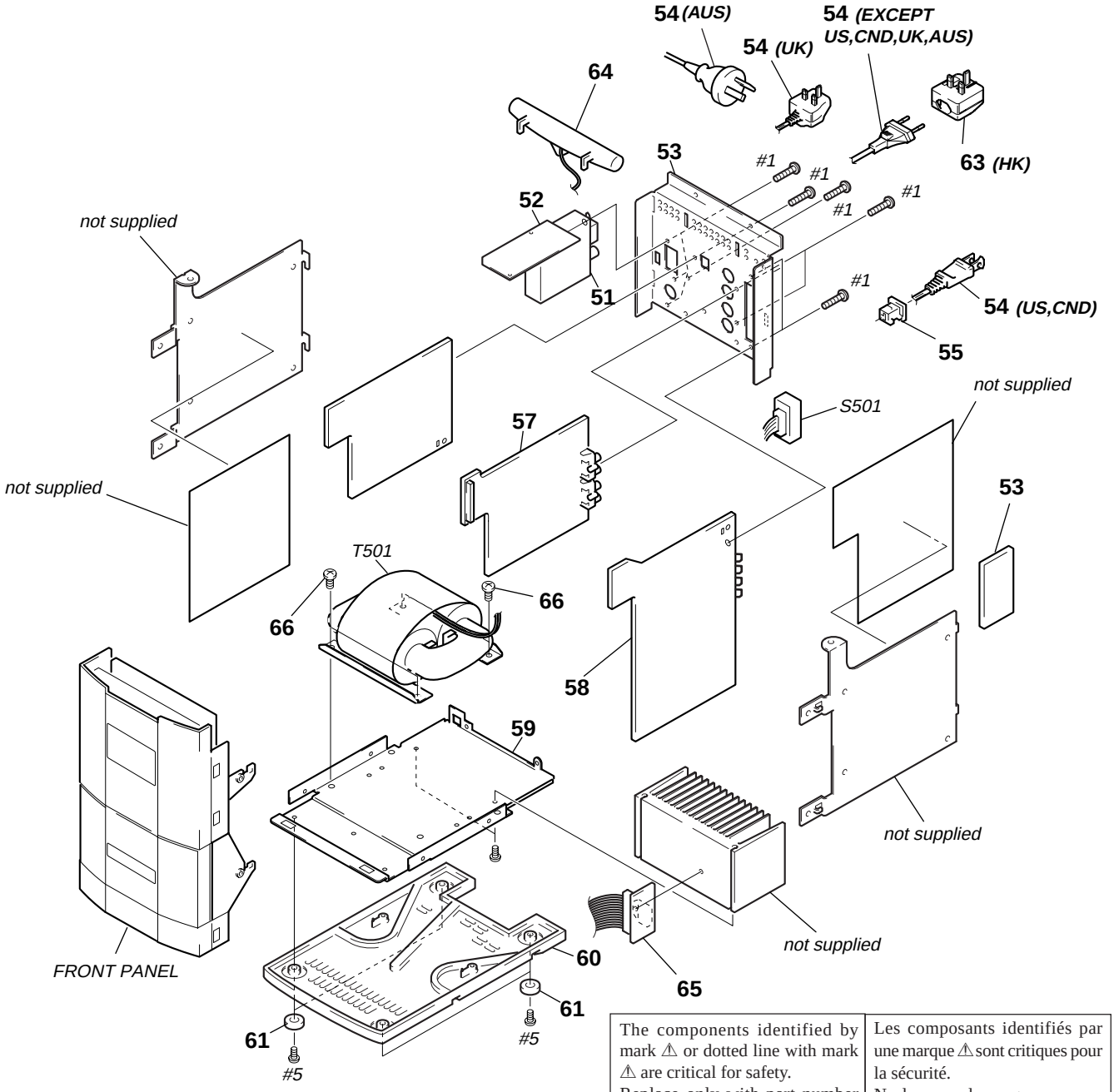
7-1. CD SECTION



Ref. No.	Part No.	Description	Remark
1	4-225-804-01	GEAR BRACKET	
2	4-225-808-01	GEAR PULLEY	
3	4-225-796-01	BELT	
4	4-225-803-01	SHAFT WASHER	
5	4-225-806-01	GEAR B	
6	4-225-807-01	GEAR C	
8	4-225-809-01	O/C PLATE	
9	4-225-756-01	DOOR CUSHION	
10	4-225-757-01	DOT	
11	4-225-786-01	DOOR GEAR	
12	X-4952-474-1	STABILIZER SUB ASSY	
13	4-225-770-01	SPRING (CD), TORSION	
14	X-4952-473-1	DOOR SUB ASSY, GLASS (AEP,UK)	
14	X-4952-591-1	DOOR SUB ASSY, GLASS (US,CND)	
14	X-4952-592-1	DOOR SUB ASSY, GLASS (MY,SP,HK,KR,TW,AUS)	

Ref. No.	Part No.	Description	Remark
15	4-225-761-01	PIN SCREW	
16	1-676-334-11	CD SW BOARD	
17	4-225-777-01	HINGE	
18	4-225-810-01	CD BASE	
19	4-225-811-01	EJECT PLATE	
20	4-225-784-01	SIDE PANEL (L)	
21	1-676-335-11	TOUCH SENSOR BOARD	
22	4-225-781-01	BACK COVER	
23	4-225-775-01	BACK COVER (2)	
24	4-225-758-01	HOOK SCREW	
25	4-225-785-01	SIDE PANEL (R)	
26	1-791-960-11	FFC (184-5GW0145-1A)	
27	4-225-760-01	SCREW +KTT 3x8	

7-2. REAR PANEL SECTION

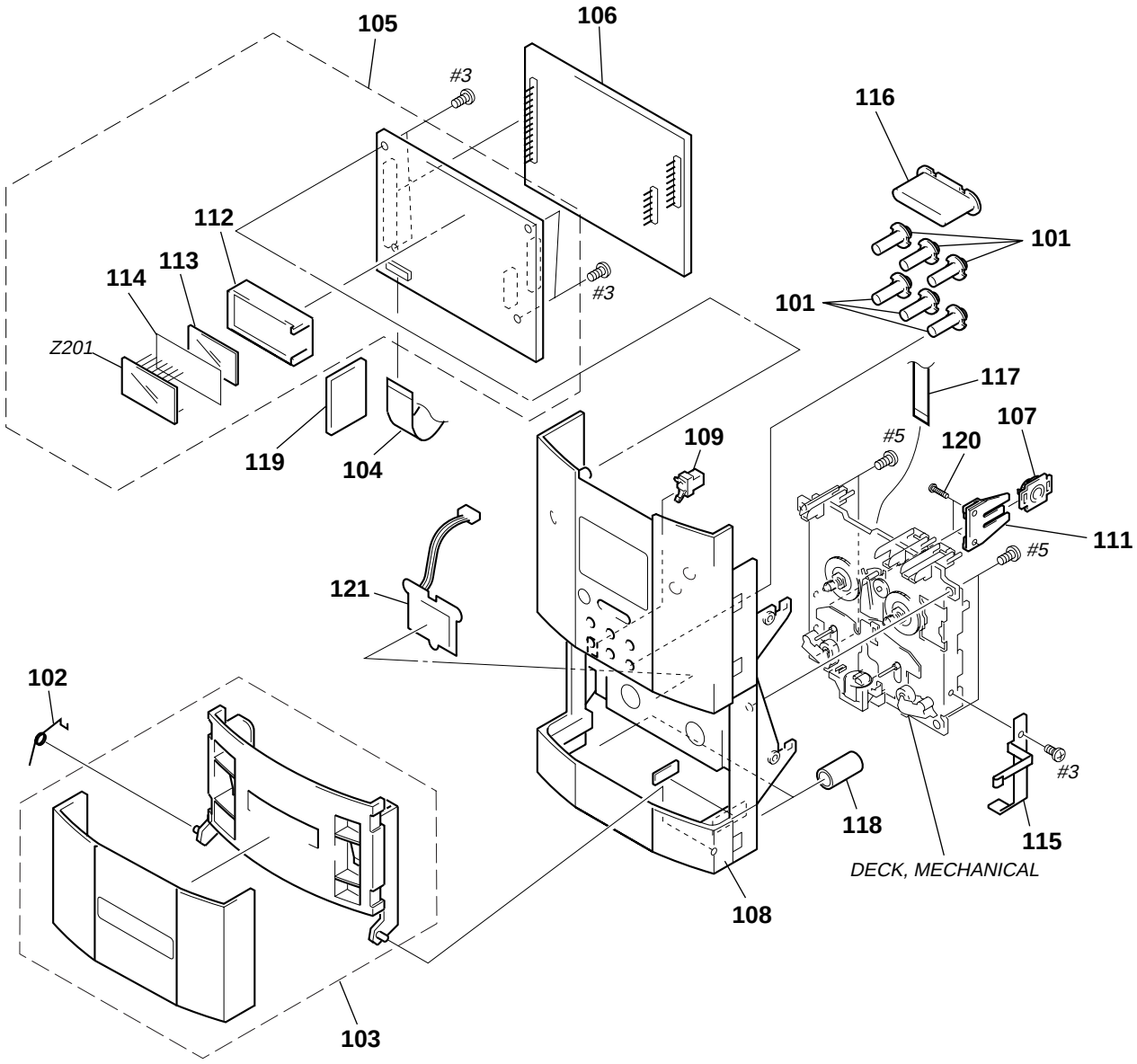


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
51	1-693-407-12	TUNER (US,CND)	
51	1-693-408-12	TUNER (EXCEPT US,CND)	
52	A-4428-246-A	RDS BOARD, COMLETE (US,CND)	
52	A-4428-110-A	RDS BOARD, COMLETE (EXCEPT US,CND)	
53	4-225-763-01	BACK BOARD	
⚠54	1-696-966-31	CORD, POWER (AUS)	
⚠54	1-555-750-11	CORD,POWER,EULOPLUG (AEP,MY,SP,HK,KR,TW)	
⚠54	1-751-535-11	CORD, POWER (UK)	
⚠54	1-783-531-51	CORD, POWER (US,CND)	
55	4-225-774-01	AC CORD BUSHING	
* 56	A-4428-109-A	TAPE PREAMP BOARD, COMPLETE	
* 57	A-4428-113-A	FUNCTION BOARD, COMPLETE	
58	A-4428-245-A	POWER AMP BOARD,COMPRETE (US,CND)	
58	A-4428-107-A	POWER AMP BOARD,COMPRETE (EXCEPT US,CND)	

Ref. No.	Part No.	Description	Remark
* 59	4-225-764-01	BOTTOM BOARD	
60	4-225-780-01	BOTTOM COVER	
61	4-225-795-01	FOOT	
⚠63	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
64	X-4949-451-1	AM ANT SUB ASSY	
65	1-676-338-11	POWER IC BOARD	
66	4-225-759-01	SCREW + BTT4x5	
⚠T501	1-435-317-11	TRANSFORMER,POWER (200-99Y0283) (US,CND)	
⚠T501	1-435-254-11	TRANSFORMER, POWER (AEP,UK,HK,AUS)	
⚠T501	1-435-256-11	TRANSFORMER,POWER (200-99Y0320) (MY,SP,KR,TW)	
⚠S501	1-771-871-11	SELECTOR,VOLTAGE (202-L16-12A) (MY,SP,KR,TW,HK)	

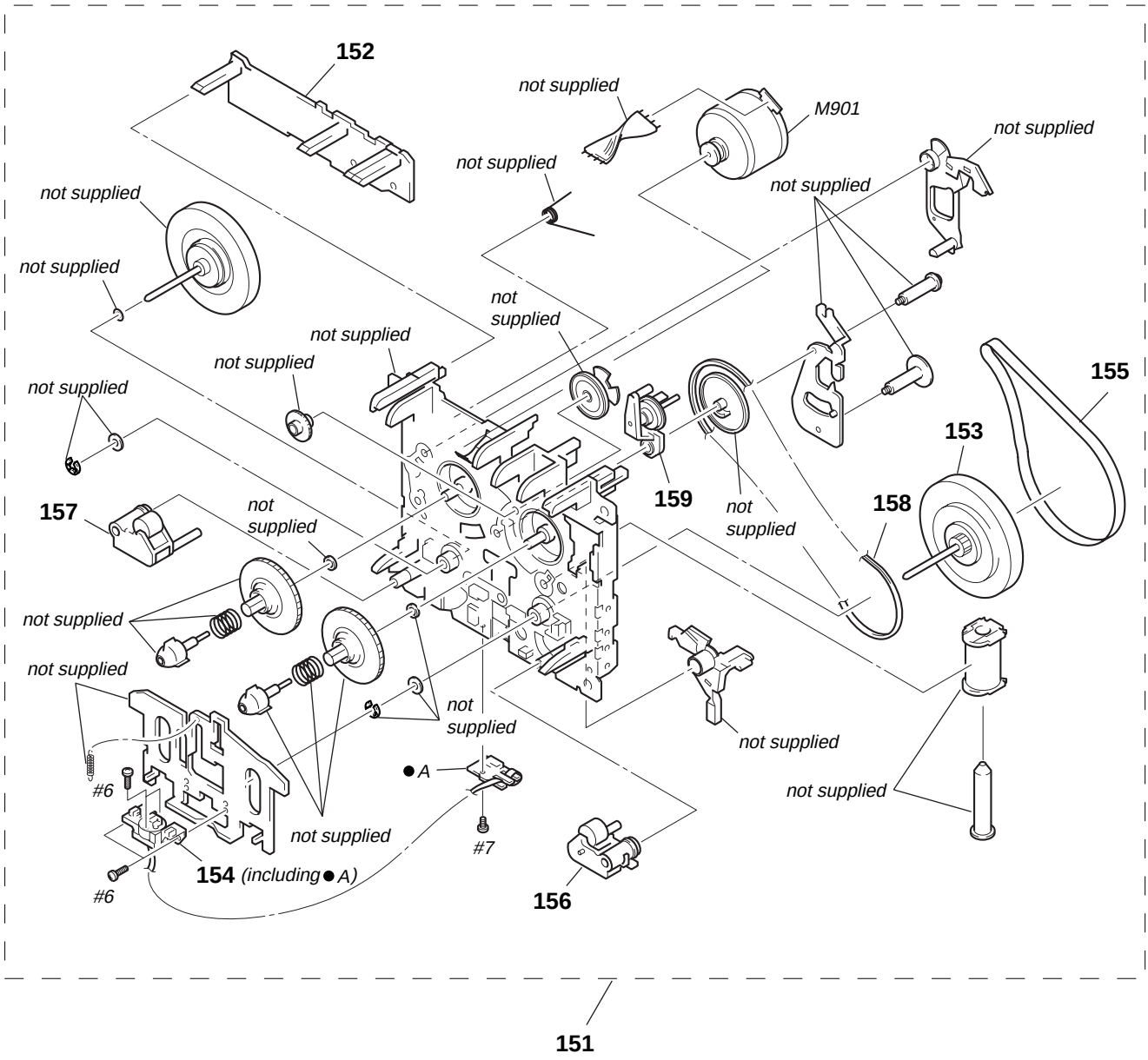
7-3. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	4-225-779-01	PUSH BUTTON	
102	4-225-771-01	SPRING (DOOR), TORSION	
103	X-4952-472-1	CASS DOOR SUB ASSY	
104	1-791-958-11	WIRE (FLAT TYPE) (15 CORE)	
* 105	A-4428-104-A	DISPLAY BOARD, COMPLETE (AEP,UK,MY,SP,KR,TW)	
* 105	A-4428-244-A	DISPLAY BOARD, COMPLETE (US,CND)	
* 105	A-4428-248-A	DISPLAY BOARD, COMPLETE (AUS,KR)	
* 105	A-4428-249-A	DISPLAY BOARD, COMPLETE (HK)	
* 106	A-4428-106-A	RELAY BOARD, COMPLETE	
107	4-225-789-01	GEAR DAMPER (GD-21-A)	
108	X-4952-469-1	PANEL SUB ASSY, FRONT	
109	4-225-790-01	DOOR LATCH (DL-05T)	

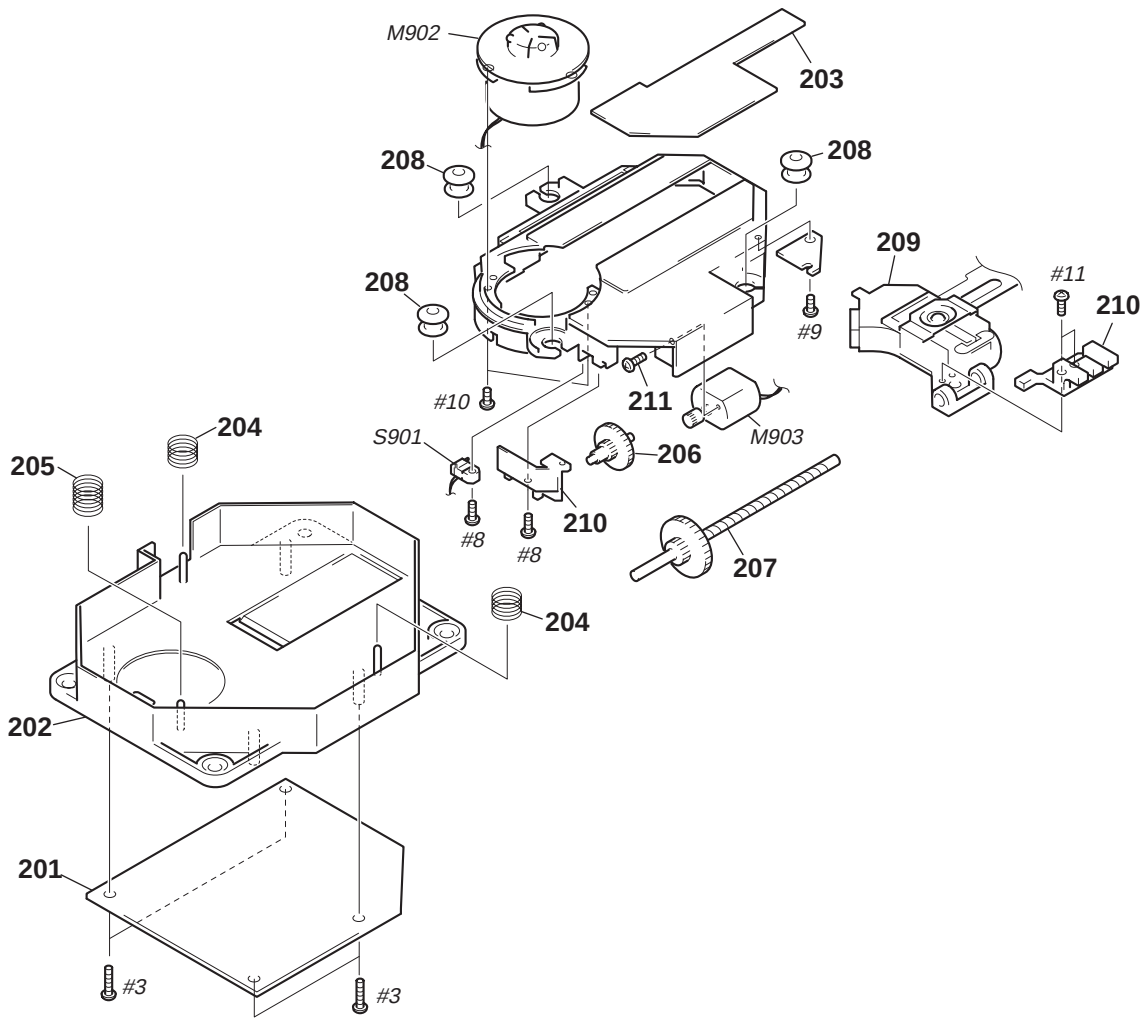
Ref. No.	Part No.	Description	Remark
111	4-225-783-01	GEAR HOLDER	
112	4-225-851-01	LCD HOLDER	
113	4-225-853-01	LIGHT BAR	
114	4-225-852-01	DISPLAY FILTER	
115	4-225-755-01	SOLDER LUG,WIRE	
116	4-225-778-01	FUNCTION BUTTON	
117	1-791-959-11	FCC (184-F312F5508),12P	
118	4-225-782-01	BOSS	
119	1-676-337-11	LED BOARD	
120	4-225-762-01	SCREW + KTP1.7x6	
121	1-418-482-11	ILLUMINATION BLOCK,LED	
Z201	1-793-885-11	INDICATOR TUBE,FLUORESCENT	

7-4. MECHANISM DECK SECTION (CASSETTE)



Ref. No.	Part No.	Description	Remark
151	1-772-264-11	DECK, MECHANICAL	
152	X-4952-487-1	CONTROL BLK ASSY	
153	X-4949-566-1	CLUTCH BLK ASSY	
154	X-4952-488-1	PLATE HD BLK ASSY	
155	4-997-983-01	BELT MAIN	
156	X-4949-568-1	ROLLER PINCH BLK R ASSY	
157	X-4949-569-1	ROLLER PINCH BLK L ASSY	
158	4-997-984-01	F/R BELT	
159	X-4949-567-1	CLUTCH BLK2 ASSY	
M901	X-4952-489-1	MTR MAIN BLK ASSY (CAPSTAN/REEL)	

7-5. BASE UNIT SECTION (CDM-61)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
* 201	A-4428-103-A	BD BOARD, COMPLETEQ	
202	4-225-776-01	BU HOLDER	
203	4-225-791-01	COLOR PLATE	
204	4-225-769-01	SPRING (BBU) ,COMPRESSION	
205	4-225-768-01	SPRING (FBU) ,COMPRESSION	
206	2-625-410-01	GEAR (B)	
207	X-2625-483-1	SCREW ASSY, SLED	

Ref. No.	Part No.	Description	Remark
208	4-962-370-01	INSULATOR	
⚠209	8-848-289-01	OPTICAL PICK-UP KSS-331A (RP)	
210	2-625-414-04	RACK	
211	3-732-988-01	SCREW (M2x2.5)	
M902	X-2625-171-1	MOTOR ASSY (SLED)	
M903	X-2625-911-1	MOTOR ASSY (TT)	
S901	1-762-571-11	SWITCH	

AC IN **BD**

SECTION 8
ELECTRICAL PARTS LIST

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  CND : Canadian model
  MY : Malaysia model
  SP : Singapore model
  KR : Korean model
  TW : Taiwan model
  AUS : Australian model
  HK : Hong Kong model

Ref. No.	Part No.	Description			Remark
	1-676-526-11	AC IN BOARD			(US,CND,AEP,UK)
		**********			
		< RESISTOR >			
⚠R551	1-202-725-00	SOLID	3.3M	10%	1/2W (US,CND,AEP,UK)
**********					
	A-4428-103-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C104	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C114	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C125	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-128-065-11	ELECT CHIP	68uF	20%	10V
C128	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C130	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C131	1-124-779-00	ELECT CHIP	10uF	20%	16V
C133	1-164-346-11	CERAMIC CHIP	1uF		16V
C134	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C135	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C136	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-164-346-11	CERAMIC CHIP	1uF		16V
C143	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C162	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C163	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C165	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C167	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C168	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
		< CONNECTOR >			
CNU101	1-793-441-21	CONNECTOR, FFC/FPC 18P			
CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P			
CNU103	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P			
CNU104	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P			
CNU105	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P			
		< FERRITE BEAD >			
FB101	1-500-445-21	FERRITE	0UH		
FB102	1-216-295-91	SHORT	0		
FB103	1-500-445-21	FERRITE	0UH		
FB104	1-216-295-91	SHORT	0		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR	MSB710-RT1		

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R101	1-216-077-91	RES,CHIP	15K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-077-91	RES,CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-216-025-91	RES,CHIP	100	5%	1/10W
R111	1-216-121-91	RES,CHIP	1M	5%	1/10W
R113	1-216-121-91	RES,CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-91	RES,CHIP	1K	5%	1/10W
R119	1-216-041-00	METAL CHIP	470	5%	1/10W
R123	1-216-049-91	RES,CHIP	1K	5%	1/10W
R124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R135	1-216-295-91	SHORT	0		
R136	1-216-295-91	SHORT	0		
R137	1-216-295-91	SHORT	0		
R138	1-216-295-91	SHORT	0		
R139	1-216-025-91	RES,CHIP	100	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES,CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-077-91	RES,CHIP	15K	5%	1/10W
R181	1-216-078-00	RES,CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-91	RES,CHIP	15K	5%	1/10W
		< RESISTOR >			
RN101	1-233-412-11	RES, CHIP NETWORK 1.0K (3216)			
RN102	1-233-576-11	RES, CHIP NETWORK 100			
		< VIBRATOR >			
X101	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
	1-676-334-11	CD SW BOARD			
		**********			
		< SWITCH >			
SW601	1-571-300-21	SWITCH, ROTARY (CD DOOR SWITCH)			
**********					

Ref. No.	Part No.	Description			Remark
	A-4428-104-A	DISPLAY BOARD, COMPLETE			
		**********			
					(AEP,UK,MY,SP,KR,TW)
	A-4428-244-A	DISPLAY BOARD, COMPLETE (US,CND)			
		**********			
	A-4428-248-A	DISPLAY BOARD, COMPLETE (AUS)			
		**********			
	A-4428-249-A	DISPLAY BOARD, COMPLETE (HK)			
		**********			
	4-225-851-01	LCD HOLDER			
	4-225-852-01	DISPLAY FILTER			
	4-225-853-01	LIGHT BAR			
		< CAPACITOR >			
C121	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C200	1-124-584-00	ELECT	100uF	20%	10V
C201	1-102-962-00	CERAMIC	30PF	5%	50V
C202	1-102-953-00	CERAMIC	18PF	5%	50V
C203	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C204	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C205	1-126-916-11	ELECT	1000uF	20%	6.3V
C206	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C207	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C208	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C209	1-162-901-11	CERAMIC	0.1uF	99%	50V
C213	1-124-584-00	ELECT	100uF	20%	10V
C220	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C232	1-124-584-00	ELECT	100uF	20%	10V
C233	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C234	1-163-031-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN1	1-784-737-11	CONNECTOR, FFC 15P			
M201	1-793-882-11	CONNECTOR (197-K310-07)			
M202	1-793-883-11	CONNECTOR (197-K310-14)			
M203	1-793-884-11	CONNECTOR (197-K310-25)			
		< DIODE >			
D201	8-719-937-56	DIODE RLS-73-TE-11			
D202	8-719-937-56	DIODE RLS-73-TE-11			
D203	8-719-937-56	DIODE RLS-73-TE-11			
D210	8-719-937-56	DIODE RLS-73-TE-11			
D211	8-719-937-56	DIODE RLS-73-TE-11			
D212	8-719-937-56	DIODE RLS-73-TE-11			
D216	8-719-937-56	DIODE RLS-73-TE-11			
		< IC >			
IC201	8-759-653-24	IC TMP87CM23F-1C04			
IC202	8-742-132-00	HYB IC SBX1976-51P			
IC203	8-759-165-80	IC PST600C-T			
		< COIL >			
L201	1-410-521-11	INDUCTOR	100uH		

DISPLAY FUNCTION

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q201	8-729-230-49	TRANSISTOR	2SC2712G-TE85L		
Q216	8-729-230-49	TRANSISTOR	2SC2712G-TE85L		
		< RESISTOR >			
R200	1-216-073-00	METAL CHIP	10K	5%	1/10W
R201	1-216-085-00	METAL CHIP	33K	5%	1/10W
R202	1-249-424-11	CARBON	3.9K	5%	1/4W F
R203	1-216-073-00	METAL CHIP	10K	5%	1/10W
R204	1-216-089-91	RES,CHIP	47K	5%	1/10W
R205	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R206	1-247-807-31	CARBON	100	5%	1/4W
R208	1-216-089-91	RES,CHIP	47K	5%	1/10W
R209	1-249-429-11	CARBON	10K	5%	1/4W
R210	1-216-073-00	METAL CHIP	10K	5%	1/10W
R211	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R212	1-216-073-00	METAL CHIP	10K	5%	1/10W
R222	1-249-429-11	CARBON	10K	5%	1/4W
R225	1-216-073-00	METAL CHIP	10K	5%	1/10W
R226	1-247-807-31	CARBON	100	5%	1/4W
R227	1-216-073-00	METAL CHIP	10K	5%	1/10W
R229	1-216-073-00	METAL CHIP	10K	5%	1/10W
R230	1-216-073-00	METAL CHIP	10K	5%	1/10W
R239	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R240	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R246	1-216-073-00	METAL CHIP	10K	5%	1/10W
R247	1-216-073-00	METAL CHIP	10K	5%	1/10W
R248	1-216-073-00	METAL CHIP	10K	5%	1/10W
R250	1-247-807-31	CARBON	100	5%	1/4W
R253	1-249-425-11	CARBON	4.7K	5%	1/4W F (US,CND,AEP,UK,MY,SP,KR,TW,AUS)
R254	1-249-420-11	CARBON	1.8K	5%	1/4W F (US,CND)
R254	1-249-418-11	CARBON	1.2K	5%	1/4W F (AEP,UK,MY,SP,KR,TW)
R254	1-249-416-11	CARBON	820	5%	1/4W F (AUS)
R255	1-216-041-00	METAL CHIP	470	5%	1/10W
R256	1-249-412-11	CARBON	390	5%	1/4W F
R257	1-216-039-00	METAL CHIP	390	5%	1/10W
R258	1-216-043-91	RES,CHIP	560	5%	1/10W
R259	1-216-045-00	METAL CHIP	680	5%	1/10W
R260	1-216-046-00	METAL CHIP	750	5%	1/10W
R261	1-216-047-91	RES,CHIP	820	5%	1/10W
R262	1-249-418-11	CARBON	1.2K	5%	1/4W F
R263	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R270	1-249-393-11	CARBON	10	5%	1/4W F
R272	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R274	1-247-807-31	CARBON	100	5%	1/4W
R275	1-216-025-91	RES,CHIP	100	5%	1/10W
R276	1-247-807-31	CARBON	100	5%	1/4W
R277	1-216-025-91	RES,CHIP	100	5%	1/10W
R278	1-216-025-91	RES,CHIP	100	5%	1/10W
R279	1-216-025-91	RES,CHIP	100	5%	1/10W
R280	1-216-025-91	RES,CHIP	100	5%	1/10W
R281	1-247-807-31	CARBON	100	5%	1/4W
R282	1-247-807-31	CARBON	100	5%	1/4W
R283	1-247-807-31	CARBON	100	5%	1/4W
R284	1-247-807-31	CARBON	100	5%	1/4W
R285	1-247-807-31	CARBON	100	5%	1/4W
R286	1-216-025-91	RES,CHIP	100	5%	1/10W
R287	1-216-025-91	RES,CHIP	100	5%	1/10W
R290	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R293	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R294	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R297	1-216-025-91	RES,CHIP	100	5%	1/10W
R210A	1-216-073-00	METAL CHIP	10K	5%	1/10W
R210B	1-249-429-11	CARBON	10K	5%	1/4W
R246A	1-216-073-00	METAL CHIP	10K	5%	1/10W
R247A	1-216-073-00	METAL CHIP	10K	5%	1/10W
R248A	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S200	1-571-760-11	SWITCH, KEY BOARD (I/⏻)			
S201	1-571-760-11	SWITCH, KEY BOARD (VOL+)			
S202	1-571-760-11	SWITCH, KEY BOARD (VOL-)			
S203	1-571-760-11	SWITCH, KEY BOARD (TUNING+/⏮◀◀)			
S204	1-571-760-11	SWITCH, KEY BOARD (TUNING-/▶▶⏭)			
S205	1-571-760-11	SWITCH, KEY BOARD (FM/►)			
S206	1-571-760-11	SWITCH, KEY BOARD (AM/◄)			
S207	1-571-760-11	SWITCH, KEY BOARD (■)			
S208	1-571-760-11	SWITCH, KEY BOARD (❚❚)			
S209	1-571-760-11	SWITCH, KEY BOARD (FUNCTION)			
		< VIBRATOR >			
X201	1-781-705-11	OSCILLATOR, CRYSTAL (131-8MHZ) (8MHz)			
		< FLUORESCENT INDICATOR TUBE >			
Z201	1-793-885-11	INDICATOR TUBE, FLUORESCENT			

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	A-4428-113-A	FUNCTION BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C307	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C308	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C310	1-126-059-11	ELECT	10uF	20%	50V
C311	1-130-471-00	MYLAR	0.001uF	5%	50V
C312	1-130-495-00	MYLAR	0.1uF	5%	50V
C313	1-126-163-11	ELECT	4.7uF	20%	50V
C314	1-126-163-11	ELECT	4.7uF	20%	50V
C315	1-126-059-11	ELECT	10uF	20%	50V
C316	1-126-059-11	ELECT	10uF	20%	50V
C317	1-126-052-11	ELECT	100uF	20%	10V
C318	1-126-052-11	ELECT	100uF	20%	10V
C319	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C320	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C321	1-126-059-11	ELECT	10uF	20%	50V
C322	1-124-997-11	ELECT	470uF	20%	10V
C323	1-124-997-11	ELECT	470uF	20%	10V
C324	1-126-059-11	ELECT	10uF	20%	50V
C325	1-126-059-11	ELECT	10uF	20%	50V
C326	1-126-059-11	ELECT	10uF	20%	50V
C327	1-126-059-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C331	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C332	1-130-495-00	MYLAR	0.1uF	5%	50V
C333	1-126-059-11	ELECT	10uF	20%	50V
C334	1-130-487-00	MYLAR	0.022uF	5%	50V
C335	1-130-488-00	MYLAR	0.027uF	5%	50V
C336	1-136-174-00	MYLAR	0.56uF	5%	50V
C337	1-126-059-11	ELECT	10uF	20%	50V
C338	1-130-495-00	MYLAR	0.1uF	5%	50V
C340	1-126-059-11	ELECT	10uF	20%	50V
C341	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C342	1-130-493-00	MYLAR	0.068uF	5%	50V
C343	1-136-174-00	MYLAR	0.56uF	5%	50V
C344	1-126-059-11	ELECT	10uF	20%	50V
C345	1-130-488-00	MYLAR	0.027uF	5%	50V
C346	1-130-487-00	MYLAR	0.022uF	5%	50V
C347	1-126-059-11	ELECT	10uF	20%	50V
C348	1-130-471-00	MYLAR	0.001uF	5%	50V
C349	1-130-495-00	MYLAR	0.1uF	5%	50V
C350	1-130-495-00	MYLAR	0.1uF	5%	50V
C351	1-126-059-11	ELECT	10uF	20%	50V
C355	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C361	1-130-472-00	MYLAR	0.0012uF	5%	50V
C362	1-130-477-00	MYLAR	0.0033uF	5%	50V
C363	1-130-495-00	MYLAR	0.1uF	5%	50V
C364	1-130-495-00	MYLAR	0.1uF	5%	50V
C369	1-130-472-00	MYLAR	0.0012uF	5%	50V
C370	1-130-477-00	MYLAR	0.0033uF	5%	50V
C373	1-126-157-11	ELECT	10uF	20%	16V
C374	1-136-173-00	MYLAR	0.47uF	5%	50V
C375	1-136-173-00	MYLAR	0.47uF	5%	50V
C376	1-124-259-11	ELECT	4.7uF	20%	35V
C377	1-124-259-11	ELECT	4.7uF	20%	35V
C378	1-130-495-00	MYLAR	0.1uF	5%	50V
C379	1-126-157-11	ELECT	10uF	20%	16V
C380	1-130-495-00	MYLAR	0.1uF	5%	50V
C381	1-136-165-00	MYLAR	0.1uF	5%	50V
C382	1-124-584-00	ELECT	100uF	20%	10V
C383	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C384	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C385	1-126-157-11	ELECT	10uF	20%	16V
C386	1-126-024-11	ELECT	220uF	20%	16V
C387	1-126-052-11	ELECT	100uF	20%	16V
C388	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C389	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C390	1-126-052-11	ELECT	100uF	20%	16V
C391	1-130-495-00	MYLAR	0.1uF	5%	50V
C392	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
		< CONNECTOR >			
* M301	1-766-719-11	CONNECTOR, BOARD TO BOARD 10P			
M302	1-573-827-11	CONNECTOR, BOARD TO BOARD 13P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D303	8-719-031-85	DIODE 1N4002L			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC301	8-759-495-85	IC M62442FP-A			
IC302	8-759-711-85	IC NJM4580E-D-TE2			
IC305	8-759-261-93	IC NJM4580LD			
		< JACK >			
JK301	1-793-889-11	JACK, PIN 2P (203-RJ1031A) (MD IN)			
JK302	1-793-889-11	JACK, PIN 2P (203-RJ1031A) (MD OUT)			
		< COIL >			
L301	1-408-080-00	INDUCTOR	100uH		
		< TRANSISTOR >			
Q301	8-729-141-30	TRANSISTOR	2SC2878A-TPE2		
Q302	8-729-141-30	TRANSISTOR	2SC2878A-TPE2		
Q303	8-729-216-22	TRANSISTOR	2SA1162G-TE85L		
Q304	8-729-141-30	TRANSISTOR	2SC2878A-TPE2		
Q305	8-729-141-30	TRANSISTOR	2SC2878A-TPE2		
Q306	8-729-216-22	TRANSISTOR	2SA1162G-TE85L		
		< RESISTOR >			
R301	1-249-417-11	CARBON	1K	5%	1/4W F
R302	1-249-417-11	CARBON	1K	5%	1/4W F
R303	1-249-417-11	CARBON	1K	5%	1/4W F
R304	1-249-417-11	CARBON	1K	5%	1/4W F
R305	1-249-417-11	CARBON	1K	5%	1/4W F
R306	1-249-417-11	CARBON	1K	5%	1/4W F
R307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R308	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R311	1-249-441-11	CARBON	100K	5%	1/4W
R312	1-216-097-91	RES,CHIP	100K	5%	1/10W
R313	1-216-097-91	RES,CHIP	100K	5%	1/10W
R314	1-216-097-91	RES,CHIP	100K	5%	1/10W
R315	1-216-097-91	RES,CHIP	100K	5%	1/10W
R316	1-216-097-91	RES,CHIP	100K	5%	1/10W
R317	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R318	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R321	1-247-903-00	CARBON	1M	5%	1/4W
R322	1-216-121-91	RES,CHIP	1M	5%	1/10W
R323	1-249-417-11	CARBON	1K	5%	1/4W F
R324	1-249-417-11	CARBON	1K	5%	1/4W F
R325	1-216-049-91	RES,CHIP	1K	5%	1/10W
R326	1-216-049-91	RES,CHIP	1K	5%	1/10W
R327	1-216-049-91	RES,CHIP	1K	5%	1/10W
R329	1-247-815-91	CARBON	220	5%	1/4W
R330	1-247-815-91	CARBON	220	5%	1/4W
R331	1-216-089-91	RES,CHIP	47K	5%	1/10W
R332	1-216-089-91	RES,CHIP	47K	5%	1/10W
R333	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R334	1-216-101-00	METAL CHIP	150K	5%	1/10W
R335	1-249-425-11	CARBON	4.7K	5%	1/4W F
R336	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R337	1-247-883-00	CARBON	150K	5%	1/4W
R338	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R339	1-216-097-91	RES,CHIP	100K	5%	1/10W
R340	1-216-097-91	RES,CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R341	1-249-437-11	CARBON	47K	5%	1/4W
R342	1-216-089-91	RES,CHIP	47K	5%	1/10W
R344	1-249-421-11	CARBON	2.2K	5%	1/4W F
R345	1-249-437-11	CARBON	47K	5%	1/4W
R346	1-216-089-91	RES,CHIP	47K	5%	1/10W
R347	1-249-425-11	CARBON	4.7K	5%	1/4W F
R348	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R353	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R354	1-249-425-11	CARBON	4.7K	5%	1/4W F
R361	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R363	1-216-073-00	METAL CHIP	10K	5%	1/10W
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W
R365	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R366	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R374	1-247-843-11	CARBON	3.3K	5%	1/4W
R375	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R376	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R377	1-247-895-91	CARBON	470K	5%	1/4W
R378	1-249-437-11	CARBON	47K	5%	1/4W
R379	1-216-089-91	RES,CHIP	47K	5%	1/10W
R380	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R381	1-216-049-91	RES,CHIP	1K	5%	1/10W
R382	1-249-441-11	CARBON	100K	5%	1/4W
R383	1-216-097-91	RES,CHIP	100K	5%	1/10W
R384	1-249-417-11	CARBON	1K	5%	1/4W F
R385	1-216-073-00	METAL CHIP	10K	5%	1/10W
R386	1-216-073-00	METAL CHIP	10K	5%	1/10W
R387	1-249-441-11	CARBON	100K	5%	1/4W
R388	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R389	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R390	1-216-075-00	METAL CHIP	12K	5%	1/10W
R391	1-216-075-00	METAL CHIP	12K	5%	1/10W
R392	1-216-049-91	RES,CHIP	1K	5%	1/10W
R393	1-216-049-91	RES,CHIP	1K	5%	1/10W
R394	1-249-441-11	CARBON	100K	5%	1/4W
R397	1-249-393-11	CARBON	10	5%	1/4W F
R398	1-216-001-00	METAL CHIP	10	5%	1/10W

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1-676-337-11 LED BOARD
****

< DIODE >

LD201	8-719-064-63	DIODE SELU5823A-TP15 (BACK LIGHT)
LD203	8-719-064-63	DIODE SELU5823A-TP15 (BACK LIGHT)

< RESISTOR >

R240A	1-249-403-11	CARBON	68	5%	1/4W F
R240B	1-249-403-11	CARBON	68	5%	1/4W F

****

A-4428-245-A POWER AMP BOARD, COMPLETE
****
(US,CND)

A-4428-107-A POWER AMP BOARD, COMPLETE
****
(AEP,UK,MY,SP,HK,KR,TW,AUS)

Ref. No.	Part No.	Description			Remark
	7-685-872-09	SCREW +BVTT 3X8 (S)			
	1-533-293-11	FUSE HOLDER			
		< CAPACITOR >			
C19	1-125-972-91	ELECT	100uF	20%	16V
C20	1-126-059-11	ELECT	10uF	20%	50V
C21	1-126-059-11	ELECT	10uF	20%	50V
C22	1-130-475-00	MYLAR	0.0022uF	5%	50V
C23	1-130-475-00	MYLAR	0.0022uF	5%	50V
C24	1-126-964-11	ELECT	10uF	20%	50V
C25	1-126-964-11	ELECT	10uF	20%	50V
C26	1-130-495-00	MYLAR	0.1uF	5%	50V
C27	1-126-860-11	ELECT	3300uF	20%	35V
C28	1-130-495-00	MYLAR	0.1uF	5%	50V
C29	1-130-495-00	MYLAR	0.1uF	5%	50V
C30	1-130-495-00	MYLAR	0.1uF	5%	50V
C31	1-126-860-11	ELECT	3300uF	20%	35V
C32	1-104-661-91	ELECT	330uF	20%	16V
C33	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C34	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C35	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C36	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C37	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C38	1-164-159-11	CERAMIC	0.1uF		50V (AEP,UK,MY,SP,HK,KR,TW,AUS)
C39	1-130-499-00	MYLAR	0.22uF	5%	50V
C40	1-130-499-00	MYLAR	0.22uF	5%	50V
C41	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C42	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C43	1-164-159-11	CERAMIC	0.1uF		50V
C44	1-164-159-11	CERAMIC	0.1uF		50V
C45	1-162-306-11	CERAMIC	0.01uF	20%	16V
C46	1-162-306-11	CERAMIC	0.01uF	20%	16V
C502	1-101-004-00	CERAMIC	0.01uF		50V
C503	1-101-004-00	CERAMIC	0.01uF		50V
C508	1-104-664-11	ELECT	47uF	20%	25V
C509	1-124-584-00	ELECT	100uF	20%	10V
C510	1-126-943-11	ELECT	2200uF	20%	25V
C511	1-126-941-11	ELECT	470uF	20%	25V
C512	1-104-653-11	ELECT	220uF	20%	16V
C513	1-126-934-11	ELECT	220uF	20%	16V
C514	1-125-972-91	ELECT	100uF	20%	16V
C515	1-125-972-91	ELECT	100uF	20%	16V
C516	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C517	1-162-851-11	CERAMIC	0.1uF	10%	16V
C518	1-162-851-11	CERAMIC	0.1uF	10%	16V
C520	1-104-652-11	ELECT	470uF	20%	10V
C521	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C522	1-126-934-11	ELECT	220uF	20%	16V
C523	1-126-934-11	ELECT	220uF	20%	16V
C524	1-162-851-11	CERAMIC	0.1uF	10%	16V
C526	1-104-652-11	ELECT	470uF	20%	10V
C527	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C530	1-126-934-11	ELECT	220uF	20%	16V

Ref. No.	Part No.	Description			Remark
C531	1-162-851-11	CERAMIC	0.1uF	10%	16V
C532	1-130-495-00	MYLAR	0.1uF	5%	50V
C538	1-163-035-00	CERAMIC CHIP	0.047uF	50V	
C539	1-163-035-00	CERAMIC CHIP	0.047uF	50V	
C540	1-101-004-00	CERAMIC	0.01uF		50V
C541	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C542	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C543	1-126-937-11	ELECT	4700uF	20%	16V
C999	1-162-851-11	CERAMIC	0.1uF	10%	16V
		< CONNECTOR >			
M501	1-784-040-11	CONNECTOR, BOARD TO BOARD 19P			
* M502	1-564-674-11	PIN, CONNECTOR 8P			
* M503	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
* M504	1-568-790-11	PIN, CONNECTOR 13P			
		< DIODE >			
D1	8-719-991-33	DIODE 1SS133T-77			
D2	8-719-937-56	DIODE RLS-73-TE-11			
D3	8-719-031-85	DIODE 1N4002L			
D4	8-719-991-33	DIODE 1SS133T-77			
D502	8-719-067-67	DIODE W02G			
D503	8-719-921-88	DIODE MTZJ-T-77-13B			
D504	8-719-110-31	DIODE MTZJ-T-77-12C			
D506	8-719-053-18	DIODE 1SR154-400TE-25			
D507	8-719-110-03	DIODE MTZJ-T-77-7.5C			
D515	8-719-077-63	DIODE 1N5402			
D516	8-719-077-63	DIODE 1N5402			
D517	8-719-077-63	DIODE 1N5402			
D518	8-719-077-63	DIODE 1N5402			
D519	8-719-053-18	DIODE 1SR154-400TE-25			
D520	8-719-053-18	DIODE 1SR154-400TE-25			
		< FUSE >			
⚠F501	1-533-419-11	FUSE, GLASS CYLINDRICAL(DIA.5) (4A/125V) (US,CND)			
⚠F501	1-532-237-00	FUSE (T3.15A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
⚠F502	1-533-419-11	FUSE, GLASS CYLINDRICAL(DIA.5) (4A/125V) (US,CND)			
⚠F502	1-532-237-00	FUSE (T3.15A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
⚠F503	1-532-742-11	FUSE, GLASS CYLINDERICAL (1.6A/125V) (US,CND)			
⚠F503	1-532-259-00	FUSE (T1.6A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
⚠F504	1-532-742-11	FUSE, GLASS CYLINDERICAL (1.6A/125V) (US,CND)			
⚠F504	1-532-259-00	FUSE (T1.6A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
⚠F505	1-532-742-11	FUSE, GLASS CYLINDERICAL (1.6A/125V) (US,CND)			
⚠F505	1-532-259-00	FUSE (T1.6A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
⚠F506	1-532-742-11	FUSE, GLASS CYLINDERICAL (1.6A/125V) (US,CND)			
⚠F506	1-532-259-00	FUSE (T1.6A/250V) (AEP,UK,MY,SP,HK,KR,TW,AUS)			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC501	8-759-701-57	IC NJM78M06FA			
IC505	8-759-288-53	IC LA5617			
		< COIL >			
L1	1-420-872-00	COIL, AIR CORE (AEP,UK,MY,SP,HK,KR,TW,AUS)			
L2	1-420-872-00	COIL, AIR CORE (AEP,UK,MY,SP,HK,KR,TW,AUS)			
		< TRANSISTOR >			
Q1	8-729-200-36	TRANSISTOR	2SA966-Y		
Q2	8-729-201-53	TRANSISTOR	2SA1015TP-GR		
Q3	8-729-201-53	TRANSISTOR	2SA1015TP-GR		
Q4	8-729-265-52	TRANSISTOR	2SC2655-Y(TPE6)		
Q6	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
Q501	8-729-230-49	TRANSISTOR	2SC2712G-TE85L		
Q502	8-729-216-22	TRANSISTOR	2SA1162G-TE85L		
Q503	8-729-201-53	TRANSISTOR	2SA1015TP-GR		
Q504	8-729-209-15	TRANSISTOR	2SD2012		
Q505	8-729-017-51	TRANSISTOR	2SB632K-E		
Q506	8-729-281-53	TRANSISTOR	2SC1815-GR		
Q507	8-729-188-23	TRANSISTOR	2SD882-P		
Q508	8-729-188-23	TRANSISTOR	2SD882-P		
Q510	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
		< RESISTOR >			
R22	1-249-429-11	CARBON	10K	5%	1/4W
R23	1-216-073-00	METAL CHIP	10K	5%	1/10W
R24	1-249-437-11	CARBON	47K	5%	1/4W
R25	1-216-073-00	METAL CHIP	10K	5%	1/10W
R26	1-216-081-00	METAL CHIP	22K	5%	1/10W
R27	1-249-441-11	CARBON	100K	5%	1/4W
R28	1-216-097-91	RES,CHIP	100K	5%	1/10W
R29	1-247-887-00	CARBON	220K	5%	1/4W
R31	1-249-417-11	CARBON	1K	5%	1/4W F
R32	1-247-863-91	CARBON	22K	5%	1/4W
R33	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R34	1-249-417-11	CARBON	1K	5%	1/4W F
R35	1-216-081-00	METAL CHIP	22K	5%	1/10W
R36	1-247-843-11	CARBON	3.3K	5%	1/4W
R37	1-216-085-00	METAL CHIP	33K	5%	1/10W
R38	1-249-425-11	CARBON	4.7K	5%	1/4W F
R39	1-249-425-11	CARBON	4.7K	5%	1/4W F
R40	1-249-389-11	CARBON	4.7	5%	1/4W F
R41	1-249-389-11	CARBON	4.7	5%	1/4W F
R42	1-216-081-00	METAL CHIP	22K	5%	1/10W
R43	1-216-081-00	METAL CHIP	22K	5%	1/10W
R44	1-216-089-91	RES,CHIP	47K	5%	1/10W
R45	1-216-083-00	METAL CHIP	27K	5%	1/10W
R46	1-216-033-00	METAL CHIP	220	5%	1/10W
R47	1-216-085-00	METAL CHIP	33K	5%	1/10W
R48	1-260-076-11	CARBON	10 (AEP,UK,MY,SP,HK,KR,TW,AUS)	5%	1/2W
R49	1-260-076-11	CARBON	10 (AEP,UK,MY,SP,HK,KR,TW,AUS)	5%	1/2W
R50	1-249-386-11	CARBON	2.7 (AEP,UK,MY,SP,HK,KR,TW,AUS)	5%	1/6W F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

POWER AMP | POWER IC | RDS

Ref. No.	Part No.	Description			Remark
R51	1-249-386-11	CARBON	2.7	5%	1/6W F
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R30A	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R30B	1-216-298-00	METAL CHIP	2.2	5%	1/10W
⚠R501	1-216-373-11	METAL OXIDE	2.2	5%	2W F
⚠R502	1-216-355-11	METAL OXIDE	3.3	5%	1W F
R503	1-249-429-11	CARBON	10K	5%	1/4W
R504	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R505	1-216-081-00	METAL CHIP	22K	5%	1/10W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R507	1-216-089-91	RES,CHIP	47K	5%	1/10W
R508	1-216-089-91	RES,CHIP	47K	5%	1/10W
R509	1-216-025-91	RES,CHIP	100	5%	1/10W
R510	1-215-869-11	METAL OXIDE	1K	5%	1W F
R511	1-247-863-91	CARBON	22K	5%	1/4W
R512	1-216-077-91	RES,CHIP	15K	5%	1/10W
R515	1-215-860-11	METAL OXIDE	33	5%	1W F
R516	1-216-049-91	RES,CHIP	1K	5%	1/10W
⚠R517	1-216-355-11	METAL OXIDE	3.3	5%	1W F
R518	1-216-041-00	METAL CHIP	470	5%	1/10W
		< RESISTOR >			
RX1	1-216-025-91	RES,CHIP	100	5%	1/10W
		< RELAY >			
RY1	1-755-067-11	RELAY			
RY501	1-755-067-11	RELAY			
		< TERMINAL >			
TM501	1-694-645-11	TERMINAL, SPEAKER			

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	1-676-338-11	POWER IC BOARD			
		**********			
		< IC >			
IC5	8-759-333-24	IC LM1876TF			

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	A-4428-110-A	RDS BOARD, COMPLETE			
		**********			
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
	A-4428-246-A	RDS BOARD, COMPLETE (US,CND)			
		**********			
		< CAPACITOR >			
C401	1-162-294-31	CERAMIC	0.001uF	10%	50V
C402	1-162-294-31	CERAMIC	0.001uF	10%	50V
C403	1-164-159-11	CERAMIC	0.1uF		50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C404	1-164-159-11	CERAMIC	0.1uF		50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C405	1-162-282-31	CERAMIC	100PF	10%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C421	1-124-589-11	ELECT	47uF	20%	16V
C423	1-126-157-11	ELECT	10uF	20%	16V
C451	1-124-257-00	ELECT	2.2uF	20%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C452	1-162-294-31	CERAMIC	0.001uF	10%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C453	1-162-291-31	CERAMIC	560PF	10%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C454	1-126-157-11	ELECT	10uF	20%	16V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C455	1-162-294-31	CERAMIC	0.001uF	10%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C456	1-102-518-11	CERAMIC	33PF	5%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
C457	1-102-518-11	CERAMIC	33PF	5%	50V
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
		< CONNECTOR >			
M401	1-774-289-11	PIN, CONNECTOR (PC BOARD) 15P			
M451	1-784-776-11	CONNECTOR, FFC 15P			
		< IC >			
IC451	8-759-450-86	IC BU1922 (AEP,UK,MY,SP,HK,KR,TW,AUS)			
		< CO2IL >			
L401	1-410-521-11	INDUCTOR	100uH		
L402	1-410-521-11	INDUCTOR	100uH		
L403	1-410-521-11	INDUCTOR	100uH		
L404	1-410-521-11	INDUCTOR	100uH		
L405	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q450	8-729-620-05	TRANSISTOR	2SC2603TP-EF		
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
		< RESISTOR >			
R401	1-249-417-11	CARBON	1K	5%	1/4W F
R402	1-249-417-11	CARBON	1K	5%	1/4W F
R403	1-247-807-31	CARBON	100	5%	1/4W
R404	1-247-807-31	CARBON	100	5%	1/4W
R405	1-247-807-31	CARBON	100	5%	1/4W
R406	1-247-807-31	CARBON	100	5%	1/4W
R408	1-249-429-11	CARBON	10K	5%	1/4W
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R409	1-249-417-11	CARBON	1K	5%	1/4W F
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R410	1-249-429-11	CARBON	10K	5%	1/4W
R411	1-249-429-11	CARBON	10K	5%	1/4W
R452	1-259-880-11	CARBON	2.2M	5%	1/4W
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R453	1-249-417-11	CARBON	1K	5%	1/4W F
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R454	1-247-815-91	CARBON	220	5%	1/4W
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		
R455	1-247-815-91	CARBON	220	5%	1/4W
			(AEP,UK,MY,SP,HK,KR,TW,AUS)		

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X451	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP,UK,MY,SP,HK,KR,TW,AUS)			
**********					
	A-4428-106-A	RELAY BOARD, COMPLETE **********			
		< CAPACITOR >			
C210	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C211	1-126-935-11	ELECT	470uF	20%	16V
C214	1-124-997-11	ELECT	470uF	20%	10V
C217	1-101-004-00	CERAMIC	0.01uF		50V
C218	1-126-927-11	ELECT	2200uF	20%	10V
C229	1-101-001-00	CERAMIC	0.001uF	50V	
C235	1-124-234-00	ELECT	22uF	20%	16V
C236	1-124-234-00	ELECT	22uF	20%	16V
C241	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C242	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C245	1-162-851-11	CERAMIC	0.1uF	10%	16V
C246	1-126-767-11	ELECT	1000uF	20%	16V
C650	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C651	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C652	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C653	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C654	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C655	1-124-589-11	ELECT	47uF	20%	16V
C797	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C798	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C799	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
		< CONNECTOR >			
CN102	1-770-167-11	CONNECTOR, FFC/FPC 19P			
CN601	1-791-970-11	CORD (197-2P/PH)			
M3011	1-766-715-21	CONNECTOR, BOARD TO BOARD 10P			
M3012	1-573-845-11	CONNECTOR, BOARD TO BOARD 13P			
M7031	1-573-845-11	CONNECTOR, BOARD TO BOARD 13P			
M7032	1-766-715-21	CONNECTOR, BOARD TO BOARD 10P			
		< DIODE >			
D200	8-719-031-85	DIODE 1N4002L			
D206	8-719-031-85	DIODE 1N4002L			
D207	8-719-031-85	DIODE 1N4002L			
D213	8-719-991-33	DIODE 1SS133T-77			
D214	8-719-991-33	DIODE 1SS133T-77			
D215	8-719-991-33	DIODE 1SS133T-77			
D217	8-719-929-15	DIODE RD9.1ESB2			
D650	8-719-110-31	DIODE RD12ESB2			
D651	8-719-110-31	DIODE RD12ESB2			
D652	8-719-991-33	DIODE 1SS133T-77			
D770	8-719-031-85	DIODE 1N4002L			
D771	8-719-031-85	DIODE 1N4002L			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC650	8-759-925-80	IC SN74HC14ANS-E05			
IC651	8-759-925-90	IC SN74HC74ANS-E05			
		< COIL >			
L202	1-410-517-11	INDUCTOR	47uH		
		< TRANSISTOR >			
Q202	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
Q203	8-729-200-36	TRANSISTOR	2SA966-Y		
Q204	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
Q205	8-729-027-31	TRANSISTOR	DTA124EKA-T146		
Q770	8-729-200-36	TRANSISTOR	2SA966-Y		
Q771	8-729-200-36	TRANSISTOR	2SA966-Y		
Q772	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
Q773	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
		< RESISTOR >			
R206	1-216-075-00	METAL CHIP	12K	5%	1/10W
R207	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R213	1-216-025-91	RES,CHIP	100	5%	1/10W
R214	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R215	1-216-025-91	RES,CHIP	100	5%	1/10W
R216	1-216-025-91	RES,CHIP	100	5%	1/10W
R218	1-216-025-91	RES,CHIP	100	5%	1/10W
R219	1-216-025-91	RES, CHIP	100	5%	1/10W
R220	1-216-025-91	RES,CHIP	100	5%	1/10W
R224	1-216-073-00	METAL CHIP	10K	5%	1/10W
R225	1-216-073-00	METAL CHIP	10K	5%	1/10W
R231	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R232	1-216-093-91	RES,CHIP	68K	5%	1/10W
R233	1-216-073-00	METAL CHIP	10K	5%	1/10W
R234	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R235	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R236	1-216-073-00	METAL CHIP	10K	5%	1/10W
⚠R237	1-215-860-11	METAL OXIDE	33	5%	1W F
R653	1-216-073-00	METAL CHIP	10K	5%	1/10W
R654	1-247-807-31	CARBON	100	5%	1/4W
R655	1-247-807-31	CARBON	100	5%	1/4W
R656	1-249-441-11	CARBON	100K	5%	1/4W
R657	1-216-099-00	METAL CHIP	120K	5%	1/10W
R774	1-249-430-11	CARBON	12K	5%	1/4W
R775	1-249-430-11	CARBON	12K	5%	1/4W
R776	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R777	1-249-418-11	CARBON	1.2K	5%	1/4W F
R231A	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R231B	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R233A	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< FLAT CABLE >			
W103	1-784-039-21	CONNECTOR, BOARD TO BOARD 19P			
W201	1-793-886-11	CONNECTOR (197-E310-07)			
W202	1-793-887-11	CONNECTOR (197-E310-14)			
W203	1-793-888-11	CONNECTOR (197-E310-25)			
W704	1-691-071-31	HOUSING, CONNECTOR 12P			

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TAPE PREAMP

Ref. No.	Part No.	Description			Remark
	A-4428-109-A	TAPE PREAMP BOARD, COMPLETE			
		**********			
	1-784-361-11	JACK (SMALL TYPE) (PHONES)			
		< CAPACITOR >			
C191	1-104-665-11	ELECT	100uF	20%	10V
C192	1-130-495-00	MYLAR	0.1uF	5%	50V
C483	1-101-004-00	CERAMIC	0.01uF		50V
C484	1-101-004-00	CERAMIC	0.01uF		50V
C700	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C703	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C704	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C705	1-126-176-11	ELECT	220uF	20%	10V
C706	1-126-176-11	ELECT	220uF	20%	10V
C707	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C708	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C709	1-137-372-11	MYLAR	0.022uF	5%	50V
C710	1-137-372-11	MYLAR	0.022uF	5%	50V
C711	1-126-059-11	ELECT	10uF	20%	50V
C712	1-126-059-11	ELECT	10uF	20%	50V
C713	1-126-052-11	ELECT	100uF	20%	10V
C714	1-104-665-11	ELECT	100uF	20%	10V
C715	1-126-052-11	ELECT	100uF	20%	10V
C716	1-130-495-00	MYLAR	0.1uF	5%	50V
C717	1-126-964-11	ELECT	10uF	20%	50V
C719	1-130-495-00	MYLAR	0.1uF	5%	50V
C720	1-130-495-00	MYLAR	0.1uF	5%	50V
C721	1-102-981-00	CERAMIC	300PF	5%	50V
C722	1-163-128-00	CERAMIC CHIP	300PF	5%	50V
C723	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C724	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C725	1-102-112-00	CERAMIC	330PF	10%	50V
C726	1-102-112-00	CERAMIC	330PF	10%	50V
C727	1-104-993-11	MYLAR	0.01uF	5%	200V
C728	1-126-964-11	ELECT	10uF	20%	50V
C729	1-137-371-11	MYLAR	0.015uF	5%	50V
C730	1-137-367-11	MYLAR	0.0033uF	5%	50V
C731	1-137-367-11	MYLAR	0.0033uF	5%	50V
C732	1-137-367-11	MYLAR	0.0033uF	5%	50V
C741	1-126-059-11	ELECT	10uF	20%	50V
C742	1-126-059-11	ELECT	10uF	20%	50V
C743	1-137-368-11	MYLAR	0.0047uF	5%	50V
C744	1-137-368-11	MYLAR	0.0047uF	5%	50V
C745	1-102-125-00	CERAMIC	4700PF	10%	50V
C746	1-102-125-00	CERAMIC	4700PF	10%	50V
C747	1-130-495-00	MYLAR	0.1uF	5%	50V
C748	1-130-495-00	MYLAR	0.1uF	5%	50V
C749	1-126-059-11	ELECT	10uF	20%	50V
C750	1-126-059-11	ELECT	10uF	20%	50V
C751	1-126-160-11	ELECT	1uF	20%	50V
C752	1-126-160-11	ELECT	1uF	20%	50V
C753	1-126-157-11	ELECT	10uF	20%	16V
C754	1-126-157-11	ELECT	10uF	20%	16V
C756	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C758	1-124-252-00	ELECT	0.33uF	20%	50V
C761	1-126-052-11	ELECT	100uF	20%	10V
C762	1-126-052-11	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remark
C799	1-101-001-00	CERAMIC	0.001uF	50V	
C801	1-126-157-11	ELECT	10uF	20%	16V
C802	1-161-772-11	CERAMIC	0.1uF	10%	25V
C799A	1-101-004-00	CERAMIC	0.01uF		50V
		< CONNECTOR >			
* M193	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* M194	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* M701	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
M902	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
M7031	1-573-827-11	CONNECTOR, BOARD TO BOARD 13P			
* M7032	1-766-719-11	CONNECTOR, BOARD TO BOARD 10P			
		< DIODE >			
D191	8-719-031-85	DIODE 1N4002L			
		< IC >			
IC191	8-759-927-82	IC BA6218			
IC701	8-759-508-69	IC BA3126N			
IC702	8-759-261-93	IC NJM4580LD			
IC703	8-759-363-21	IC HA12203			
JK800	8-749-923-04	IC TOTX178A (CD DIGITAL OUT)			
		< COIL >			
L701	1-410-774-11	INDUCTOR	8.2mH		
L702	1-410-774-11	INDUCTOR	8.2mH		
L703	1-431-707-11	TRANSFORMER, BIAS OSCILLATION			
L704	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q702	8-729-194-57	TRANSISTOR	2SC945-P		
Q704	8-729-194-57	TRANSISTOR	2SC945-P		
Q705	8-729-194-57	TRANSISTOR	2SC945-P		
Q706	8-729-141-83	TRANSISTOR	2SB1375		
Q707	8-729-194-57	TRANSISTOR	2SC945-P		
Q708	8-729-194-57	TRANSISTOR	2SC945-P		
		< RESISTOR >			
R191	1-249-429-11	CARBON	10K	5%	1/4W
R192	1-249-455-11	CARBON	4.7	5%	1/4W
R245	1-216-073-00	METAL CHIP	10K	5%	1/10W
R265	1-216-073-00	METAL CHIP	10K	5%	1/10W
R266	1-216-073-00	METAL CHIP	10K	5%	1/10W
R267	1-216-073-00	METAL CHIP	10K	5%	1/10W
R268	1-216-073-00	METAL CHIP	10K	5%	1/10W
R269	1-216-073-00	METAL CHIP	10K	5%	1/10W
R271	1-249-429-11	CARBON	10K	5%	1/4W
R288	1-216-073-00	METAL CHIP	10K	5%	1/10W
R289	1-216-073-00	METAL CHIP	10K	5%	1/10W
R290	1-216-073-00	METAL CHIP	10K	5%	1/10W
R291	1-216-073-00	METAL CHIP	10K	5%	1/10W
R295	1-216-045-00	METAL CHIP	680	5%	1/10W
R296	1-216-045-00	METAL CHIP	680	5%	1/10W
R298	1-216-085-00	METAL CHIP	33K	5%	1/10W
R299	1-216-085-00	METAL CHIP	33K	5%	1/10W
R485	1-249-407-11	CARBON	150	5%	1/4W F
R486	1-249-407-11	CARBON	150	5%	1/4W F

Ref. No.	Part No.	Description			Remark
R650	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R651	1-216-091-00	METAL CHIP	56K	5%	1/10W
R652	1-216-025-91	RES,CHIP	100	5%	1/10W
R701	1-216-025-91	RES,CHIP	100	5%	1/10W
R702	1-247-807-31	CARBON	100	5%	1/4W
R703	1-216-107-00	METAL CHIP	270K	5%	1/10W
R704	1-216-107-00	METAL CHIP	270K	5%	1/10W
R705	1-249-404-00	CARBON	82	5%	1/4W F
R706	1-249-404-00	CARBON	82	5%	1/4W F
R707	1-216-081-00	METAL CHIP	22K	5%	1/10W
R708	1-216-081-00	METAL CHIP	22K	5%	1/10W
R709	1-216-100-00	RES,CHIP	130K	5%	1/10W
R710	1-216-100-00	RES,CHIP	130K	5%	1/10W
R711	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R712	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R713	1-247-815-91	CARBON	220	5%	1/4W
R714	1-216-033-00	METAL CHIP	220	5%	1/10W
R715	1-249-437-11	CARBON	47K	5%	1/4W
R716	1-247-815-91	CARBON	220	5%	1/4W
R717	1-249-430-11	CARBON	12K	5%	1/4W
R718	1-249-430-11	CARBON	12K	5%	1/4W
R719	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R720	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R721	1-216-081-00	METAL CHIP	22K	5%	1/10W
R722	1-247-863-91	CARBON	22K	5%	1/4W
R723	1-249-381-11	CARBON	1	5%	1/4W F
R724	1-216-081-00	METAL CHIP	22K	5%	1/10W
R725	1-216-073-00	METAL CHIP	10K	5%	1/10W
R741	1-249-435-11	CARBON	33K	5%	1/4W
R742	1-247-863-91	CARBON	22K	5%	1/4W
R743	1-216-049-91	RES,CHIP	1K	5%	1/10W
R744	1-216-049-91	RES,CHIP	1K	5%	1/10W
R745	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R746	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R749	1-216-097-91	RES,CHIP	100K	5%	1/10W
R750	1-216-109-00	METAL CHIP	330K	5%	1/10W
R751	1-249-429-11	CARBON	10K	5%	1/4W
R752	1-216-083-00	METAL CHIP	27K	5%	1/10W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-216-049-91	RES,CHIP	1K	5%	1/10W
R757	1-247-885-00	CARBON	180K	5%	1/4W
R758	1-247-840-00	CARBON	2.4K	5%	1/4W
R759	1-249-432-11	CARBON	18K	5%	1/4W
R760	1-247-840-00	CARBON	2.4K	5%	1/4W
R761	1-247-866-11	CARBON	30K	5%	1/4W
R762	1-247-866-11	CARBON	30K	5%	1/4W
R763	1-216-089-91	RES,CHIP	47K	5%	1/10W
R764	1-249-437-11	CARBON	47K	5%	1/4W
R765	1-216-089-91	RES,CHIP	47K	5%	1/10W
R766	1-249-437-11	CARBON	47K	5%	1/4W

< VARIABLE RESISTOR >

VR701	1-230-499-11	RES, ADJ, CARBON 100K (REC LEVEL L)
VR702	1-230-499-11	RES, ADJ, CARBON 100K (REC LEVEL R)
VR703	1-230-497-11	RES, ADJ, CARBON 22K (PB LEVEL L)
VR704	1-230-497-11	RES, ADJ, CARBON 22K (PB LEVEL R)
VR705	1-230-495-11	RES, ADJ, CARBON 2K (REC BIAS L)
VR706	1-230-495-11	RES, ADJ, CARBON 2K (REC BIAS R)

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Ref. No.	Part No.	Description			Remark
	1-676-335-11	TOUCH SENSOR BOARD			
		**********			
		< CAPACITOR >			
C601	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
		< RESISTOR >			
R601	1-216-049-91	RES,CHIP	1K	5%	1/10W

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	MISCELLANEOUS	
	**********	
51	1-693-407-12	TUNER (US,CND)
51	1-693-408-12	TUNER (EXCEPT US,CND)
⚠54	1-555-750-11	CORD, POWER, EULO PLUG (AEP,MY,SP,HK,KR,TW)
⚠54	1-783-531-51	CORD, POWER (US,CND)
⚠54	1-696-966-31	CORD, POWER (AUS)
⚠54	1-751-535-11	CORD, POWER (UK)
⚠63	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)
104	1-791-958-11	WIRE (FLAT TYPE)(15CORE)
117	1-791-959-11	FFC (184-F312F5508),12P
121	1-418-482-11	ILLUMINATION BLOCK, LED
151	1-772-264-11	DECK, MECHANICAL
⚠201	8-848-289-31	DEVICE, OPTICAL KSS-331A (RP)
M901	X-4952-489-1	MTR MAIN BLK ASSY(CAPSTAN/REEL)
M902	X-2625-171-1	MOTOR ASSY (SLED)
M903	X-2625-911-1	MOTOR ASSY (TT)
S501	1-771-871-11	SELECTOR, VOLTAGE (202-L16-12A) (MY,SP,KR,TW,HK)
S901	1-762-571-11	SWITCH
⚠T501	1-435-254-11	TRANSFORMER, POWER (200-99Y0282) (AEP,UK,HK,AUS)
⚠T501	1-435-317-11	TRANSFORM, POWER (200-99Y0283) (US,CND)
⚠T501	1-435-256-11	TRANSFORM, POWER (200-99Y0320) (MY,SP,KR,TW)
Z201	1-793-885-11	INDICATOR TUBE,FLUORESCENT

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	HARDWARE LIST	
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#1	7-685-246-19	SCREW + KTP 3x8 TYPE2 SLIT
#2	7-685-547-19	SCREW + BTP 3x10 TYPE2 N-S
#3	7-685-534-19	SCREW + BTP 2.6x8 TYPE2 N-S
#4	7-621-775-10	SCREW + B 2.6x4 TYPE2 N-S
#5	7-685-546-19	SCREW + BTP 3x8 TYPE2 N-S
#6	7-623-553-88	SCREW, PRECISION + P 2x7
#7	7-627-554-28	SCREW, PRECISION + P M2x5 TYPE1
#8	7-685-105-19	SCREW (2x8) ,TAPPING (B)
#9	7-685-104-19	SCREW (2x6) ,TAPPING (B)
#10	7-627-852-18	SCREW, PRECISION + P 1.7x4 TYPE3
#11	7-627-852-17	+ P 1.7x4

9-929-025-11
(SP)
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Sony Corporation
Home Audio Company

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